

Approval of submitted plans is not an approval of omissions or oversights by this office or non compliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

engineering must be posted on the job at all inspections in a visible and readily accessible location.

Full sized legible color plans are required to be provided by the permitee on site for inspection.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building Planning
Engineering Public Works

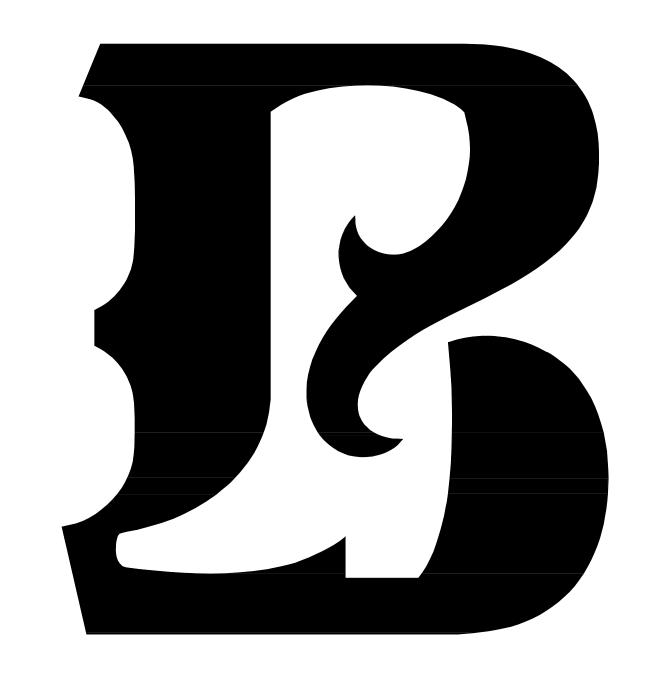
PLYWOOD POINT-OF-SALE

REFERENCE REGISTER

POLYVINYL CHLORIDE PROJECT MANAGER RETURN AIR

REFLECTED CEILING PLAN

Traffic

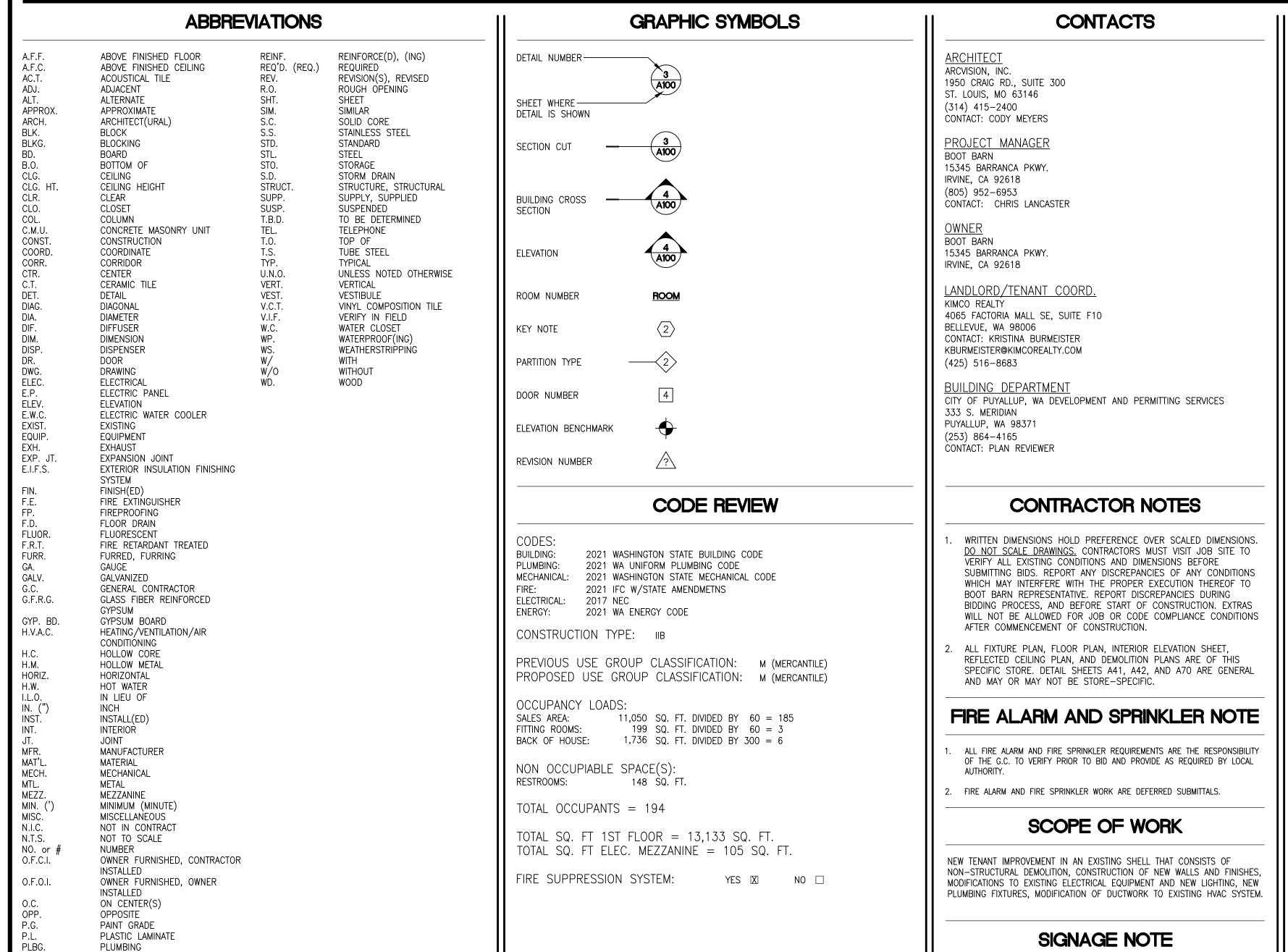


BOOT BARN

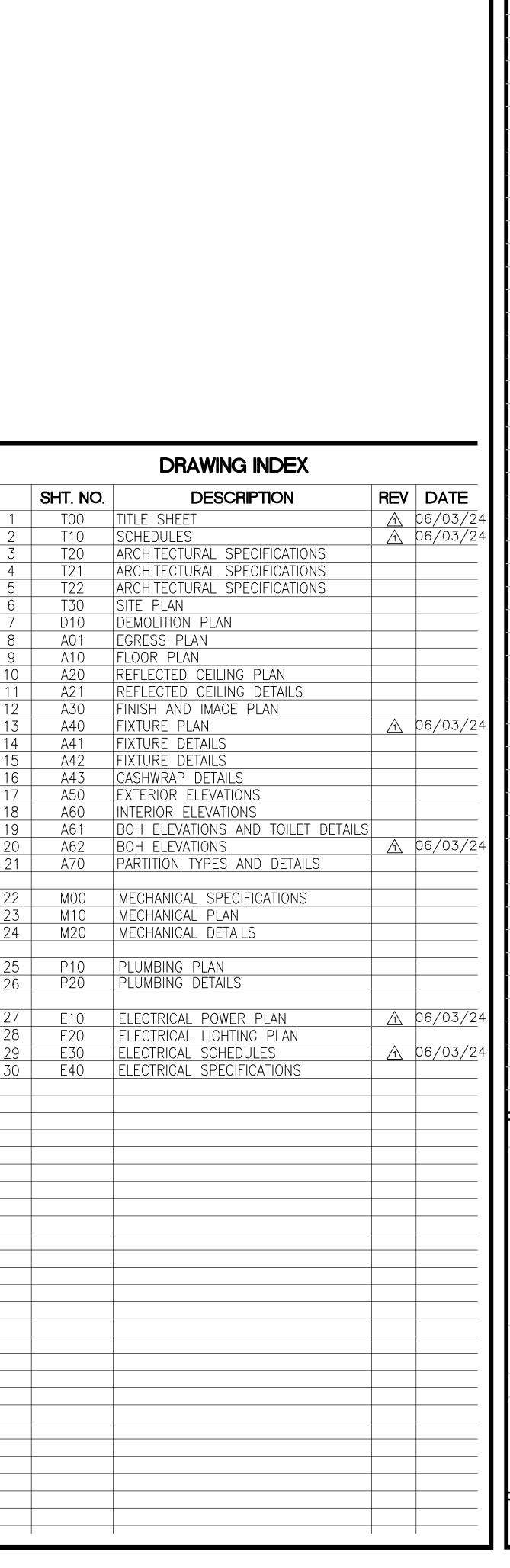
SOUTH HILL CENTER

4102D S. MERIDIAN SPACE D-1
PUYALLUP, WA 98373
STORE #502

1. EXTERIOR SIGNAGE UNDER SEPARATE PERMIT BY SIGN VENDOR.







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SOUTH

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05/31/2024

VENDOR SCHEDULE		FINISH	H SCHEDUL	E		RESPO	DNSIBI	ILITY SCHEDU	JLE		PRCTI20240669
COMPANYCONTACTPHONE NUMBEREMAIL ADDRESSBREWSTERLAURA BEARS(781) 437-9104Ibears@brewp.com	TAG DESCRIPTION	FINISH	MANUFACTURER S	SUPP. INST. REI	MARKS		FU	JRNISH INSTALL		N SEAL	6897
BEELINE XIN YIE NG (510) 477-5475 xin@beelinegroup.com CARHARTT JEN KUPTZ (313) 409-2523 jkuptz@carhartt.com	2' X 4' X 5%"	STYLE: RADAR CLIMAPLUS NO: 2410 COLOR: MIST (STANDARD COLOR)	USG CEILINGS	G.C. G.C. REP	PRESENTATIVE: MATT CRONIN, (248) 860-9900	DIVISION TITLE	STING ANT ANT GC	G.C. ANT ANT C.C. ANT G.C. IDLORD	REMARKS	IRATIO	REGISTIFIED ARCHITICT CERTIFICATION
CONTROLTEK USA NICOLE PEDRICK (908) 603-0071 nicole.pedrick@controlusa.com	ACOUSTICAL TILE GRID	PROFILE: DX/DXL COLOR: MIST				DIVISION 1: GENERAL DATA			<u> </u>	REGIS	FREDERICK J. GOGLIA STATE OF WASHINGTON
DDS/ BUNZL BRIAN O'DONNELL (612) 813-5244 brian.odonnell@bunzlbrs.com MOOD MEDIA ZINNIA SALECEDO (512) 820-0962 zinnia.salcedo@moodmedia.com	C-1A CARPET TILE 24" X 24"	STYLE: CHENGDU NO: BT227 COLOR: 7885 CHOCOLATE	MOHAWK (BIGELOW) TI	TENANT G.C. REP	PRESENTATIVE: MICHELLE DAVIDSON, (248) 0-3636. G.C. TO INSTALL CARPET TILE 1/4 RN TO ADJACENT CARPET TILE.	PERMITS, FEES, AND INSURANCE TEMPORARY UTILITIES	•		COORDINATE WITH PERMIT EXPEDITOR.		05/31/2024
MIDWEST LIGHTING ANO GULASARIAN (323) 957-6031 ano@midwestlighting.com PACIFIC NEON RYAN DRURY (800) 927-4762 ryan@pacificneon.com	CG-1 CORNER GUARD 2" X 2" X 48"	STAINLESS STEEL	T.B.D.	G.C. G.C.		PROFESSIONAL CLEANING	•	•	CLEANED PRIOR TO PUNCHLIST AND AGAIN BEFORE OPENING.		
SCEKC SHORT CIRCUIT STEVE FRANCIS (816) 878-6775 steve.francis@scekc.com terry.renner@securitases.com	CS-1 CONCRETE SEALER	STYLE: PETROTEX NO: DS.174.5-0415	L&M CONSTRUCTION CHEMICALS	DEN	. TO GRIND SLAB TO 400 GRIT UTILIZING A ISIFIER/HARDENER PRODUCT DURING THE DCESS. PENETRATING SEALER TO PROVIDE A	CERTIFICATE OF OCCUPANCY DUMPSTERS AND TRASH BINS	•	•	COORDINATE WITH MALL MANAGEMENT.		63146 cv.com
SPACEWALL SUE WALLER (360) 886-1260 suewaller3@comcast.net TAILWIND TALI RAMIREZ (763) 577-4039 tramirez@tailwindvoiceanddatat.com				MAT	TE FINISH. INSTALL AND MAINTAIN PER NUFACTURERS RECOMMENDATIONS.	DIVISION 2: SITE WORK DEMOLITION	•		REFER TO SHEET D10 AND MEP DRAWINGS.	J	WWW.ar
TINKERTIN MATTHEW HANNULA (805) 305-8773 matthew@tinkertin.com WRANGLER JOE TOMEU (941) 809-7333 joe.tomeu@kontoorbrands.com	- EXTAIN STONE	STYLE: MOUNTAIN LEDGE COLOR: BITTEROOT	EĽDÖRÁDŐ ŠTÖNÉ OR APPROVED EQUAL	G.C. G.C. REP	PRESENTATIVE: (800) 745-8132	BARRICADE/BARRIER	•		COORDINATE WITH TENANT AND LANDLORD.	2	SH LO
XPANDA HAITHAM TABBARA (365) 777-9928 haitham@xpandasecuritygates.com	EXT-2 20 GA. METAL PANEL 16" WIDE 40' MAX. LENGTH	STYLE: UNA-CLAD PROFILE: CFP-16F COLOR: REGAL RED SR	FIRESTONE METAL PRODUCTS	G.C. G.C. REP	PRESENTATIVE: LYNN RICE, (248) 442-0472	SITE LIGHTING CONCRETE PAVERS/SIDEWALK/PARKING/CURBS	× × × × × •		<u> </u>		12-2300
DOOR SCHEDULE	EXT-3 E.I.F.S.	COLOR MATCH BOOT BARN BRAND RET TEXTURE: #534 SAND FINE	PÁRÉX	GC GC REP	PRESENTATIVE: (866) 516-0061	DIVISION 3: CONCRETE CONCRETE TOPPING/LEVELING/SLAB			AS REQUIRED		(3/4)
DOOR FRAME DOOR LOCATION SIZE MATERIAL FINISH SUPP. BY MATERIAL FINISH BY MATERIAL FINISH BY BY BY BY	EXT-4 20 GA. METAL PANEL	STYLE: CORRUGATED METAL PANELS PROPILE: COLOR: STANDARD "GREY" METAL	PRODUCTS PRODUCTS	G.C. G.C. REP	'RESENTATIVE: LYNN RICE, (248), 442-0472	CONCRETE CUTTING AND CORING	•		AS REQUIRED	\mathbb{Q}	NRB, RDI UTE 300 FAX (31
STOREFRONT (2) 31-0" X 7-0" ALUM. & MILL G.C. G.C. ALUM. MILL G.C. G.C. MATCH EXISTING STOREFRONT SYSTEM	FRP-1 FIBERGLASS REINFORCED PLASTIC	STYLE: P100 COLOR: WHITE	MARLITE	G.C. G.C. SEE	SIMILAR DETAIL 11/A70.	LATAPOXY TOPPING AND EAS PREPARATION AND SEALER ***********************************	* * * * * * * * * * * * * * * * * * *		× × × × × × × × × × × × × × × × × × ×		ARCHITECT, NCAF 950 CRAIG ROAD, SUI H. (314) 415-2400
	L-1 LAMINATE	NO: 8842-WR COLOR: WEATHERED ASH FINISH: WOODBRUSH			PRESENTATIVE: (800) 367-6422	DIVISION 4: MASONRY					MAIG RC () 415-2
Z MANAGER'S OFFICE 3 -0	L-2 LAMINATE	NO: WZ0045T COLOR: VALIDATE WE DO FINISH: TEXTURE	NEVAMAR		PRESENTATIVE: MARYBETH WATSON, (586) 3-6954	DIVISION 5: METALS			• • • • • • • • • • • • • • • • • • • •		ARCH 1950 CF PH. (314
3 STOCKROOM (2) 3'-0" X 7'-0" ALUM G.C. G.C. H.M. P-6 G.C. G.C. H.M. P-6 G.C. G.C. HALF KICKPLATE	L-3 LAMINATE	NO: 845-58 COLOR: SPECTRUM RED FINISH: MATTE	FORMICA	G.C. G.C. REP	PRESENTATIVE: (800) 367-6422	METAL FRAMING DEMISING WALL METAL STUD FRAMING	•	•			7-1
4 FITTING ROOMS 3'-0" X 6'-0" X 134" S.C. WOOD P-6 G.C. G.C. H.M. P-6 G.C. G.C. BOTTOM OF DOOR INSTALLED AT 1'-0"	L-4 LAMINATE	NO: PR2002T COLOR: PAPIER AU LAIT	NEVAMAR	G.C. G.C. REP 863	PRESENTATIVE: MARYBETH WATSON, (586) 5-6954	SHEET METAL BACKING DIVISION 6: WOODS AND PLASTICS	•	•	20 GAUGE MINIMUM. COORDINATE LOCATION WITH TENANT.		City of Puyallup ppment & Permitting Service
A.F.F. S.C. P.G. D.C. DOOR TO BE UNDERCUT 1" AS	L-5 LAMINATE	FINISH: TEXTURE (MATTE) NO: 4871-60 COLOR: WESTERN SUEDE	WILSONART	G.C. G.C. REP	PRESENTATIVE: (800) 433-3222	FIRE RETARDANT LUMBER/PLYWOOD	•	•	WHEN REQUIRED BY JURISDICTION.	Develor	ISSUED PERMIT
DEAD EVIT AT	L-6 LAMINATE	FINISH: MATTE NO: SG211 COLOR: INGOT GRAY	PIONITE	G.C. G.C. REP	PRESENTATIVE: MARYBETH WATSON, (586)	UNLOAD AND UNCRATE FIXTURES CUSTOM WALL FIXTURES AND CABINETS	•	•	REFER TO FIXTURE PLAN.	Bu	Planning Planning
STOCKROOM LAISTING	M-1 CORRUGATED METAL PANELS	FINISH: SUEDE 1/2" 22G90	TBD	G.C. G.C. 14'>	X2' SHEETS TO BE CUT IN FIELD AS NEEDED.	CASHWRAP AND DISPLAY FIXTURES CUSTOM FLOOR FIXTURES	•	•	REFER TO DRAWINGS FOR MORE INFORMATION. REFER TO FIXTURE PLAN.	Engi	gineering Public Works
7 REAR EXIT AT SALES EXISTING G.C. TO REPLACE HARDWARE	P-1 PAINT	(G.C. TO RUST/AGE METAL) NO: 6695 COLOR: SLATE GRAY	BEHR		IELS TO BE INSTALLED VERTICALLY ON WALL.	FITTING ROOM HOOKS MERCHANDISE DISPLAY STANDARDS	•	•	REFER TO DRAWINGS FOR MORE INFORMATION. REFER TO DRAWINGS FOR MORE INFORMATION.	F	Fire Traffic
8 EXISTING DOORS EXISTING G.C. TO REPAIR TO "LIKE NEW" CONDITION, REPLACE HARDWARE AS REQUIRED	P-2 PAINT	NO: AF-100 COLOR PASHMINA	BENJAMIN MOORE BENJAMIN MOORE	REP IF		ACCESSIBLE FITTING ROOM BENCH DIVISION 7: THERMAL AND MOISTURE PROTECTION	•	•	REFER TO DRAWINGS FOR MORE INFORMATION.		
9 OVERHEAD ROLLING DOOR EXISTING G.C. TO REPAIR TO "LIKE NEW" CONDITION, REPLACE HARDWARE AS	P-3 PAINT	NO: SW 7005	SHERWIN WILLAMS	CON SAM	WRACTOR TO COLOR MATCH AND SUBMIT MPLES FOR APPROVAL. PRESENTATIVE: (800) 321-8194	INSULATION ROOF PENETRATION, CURB, AND FLASHING	•	•	WHERE NOTED ON PLANS. REFER TO MECHANICAL DRAWINGS AND COORDINATE WITH		
STOREFRONT EXISTING G.C. TO REPAIR TO "LIKE NEW"	- T - S T AINT	COLOR: PURE WHITE FINISH: EGGSHELL	OR APPROVED EQUAL	IF S	SPECIFIED PAINT MANUFACTURER IS UNAVAILABLE, NTRACTOR TO COLOR MATCH AND SUBMIT	SEALANTS AND CAULKING	•	•	LANDLORD.		
ENTRY	P-4 PAINT	NØ: 2154-38 COLOR BUTTERCUP	BENJAMIN MØORE ØR APPROVED	RÉP IPS	PRESENTATIVE: (888) 236-6667 SPECIFIED PAINT MANUFARTURER IS UNAVAILABLE,	MOISTURE BARRIER FIRESTOPPING	•	•	INSTALL PER CODE REQUIREMENTS.		
11 UTILITY CLOSET 3'-0" X 7'-0" X 1 ¾" S.C. P.G. WOOD P-6 G.C. G.C. H.M. P-6 G.C. G.C.	PX5 PAINT	NO: \SW\-6871	SHERWIN WILLIAMS	G.C. G.C. REP	WRACTOR TO COLOR MATCH AND SUBMIT PRESENTATIVE: (800) 321-8194	SPRAY-ON FIREPROOFING (PATCH AND REPAIR) DIVISION 8: DOORS AND WINDOWS	•		WHEN REQUIRED.		
STORAGE 3'-0" X 7'-0" X 1¾" S.C. WOOD P-6 G.C. G.C. H.M. P-6 G.C. G.C. DOOR TO BE UNDERCUT 1" AS REQUIRED	P-6 PAINT	NO: TBD COLOR: BLACK	imesLOR APPROVED	IF S CON	SPECIFIED PAINT MANUFACTURER IS UNAVAILABLE, NTRACTOR TO COLOR MATCH AND SUBMIT MPLES FOR APPROVAL.	1. DOORS A. INTERIOR DOORS AND FRAMES	•	•	REFER TO DOOR SCHEDULE.		
13 BACKWRAP POCKET 3'-6" X 7'-0" - G.C. G.C G.C. G.C.	P-9 PAINT	NØ: SW-6000 CØLØR: SNOWFALL				B. FITTING ROOM DOORS C. RATED METAL DOORS AND FRAMES	•	•	REFER TO DOOR SCHEDULE. REFER TO DOOR SCHEDULE.		
NOTE: ALL LOCKS TO BE KEYED OR RE-KEYED TO BOOT BARN SPECIFICATIONS: ALL PERIMETER DOORS TO BE KEYED ALIKE (QTY. 8 KEYS)	P-10 PAINT	NO. SW-6004 COLOR: MINK				D. REAR SERVICE DOOR(S) AND FRAME(S) E. ENTRY DOORS	•	•	REFER TO DOOR SCHEDULE. REFER TO DOOR SCHEDULE.		
MANAGER'S OFFICE KEYED SEPARATELY (QTY. 8 KEYS) ALL OTHER DOORS KEYED ALIKE (QTY. 16 KEYS). GC. TO PROVIDE NON REMOVABLE PIN HINGES FOR ALL EXTERIOR DOORS IF NOT ALREADY EXISTING.		NO: PLFL91109PB	IFS COATINGS		PRESENTATIVE: BRANDON PHILLIPS, (616)	F. METAL CEILING ACCESS PANEL(S) 2. HARDWARE AND SPECIALTIES	•	•	WHERE INDICATED ON PLANS. 24" X 24" MINIMUM.		
ALL DOORS IN THE MEAN OF EGRESS SHALL BE SINGLE ACTION RELEASE AND SHALL NOT REQUIRE THE USE OF A KEY, TOOL, OR SPECIAL KNOWLEDGE TO OPEN FROM EGRESS SIDE. EXIT DOORS SHALL BE OPERABLE FROM WITHIN WITHOUT USE OF ANY SPECIAL KNOWLEDGE OR EFFORT WHEN THE SPACE IS OCCUPIED.	PC-2 POWDER COAT	COLOR: GINGER SPICE NO: PLBS90914PB COLOR: SMOKED BRONZE		291	-4126	A. DOOR HARDWARE	•	•	REFER TO DOOR SCHEDULE. ALARM, EXIT, PUSH BAR, AND VIEWER. REFER TO DOOR		
MAXIMUM PULL FORCES FOR INTERIOR AND EXTERIOR DOOR SHALL NOT EXCEED: 5 LBS. FOR INTERIOR DOORS/5 LBS. FOR EXTERIOR DOORS/15 LBS. FORCE FOR FIRE RATED DOORS. LEVER HANDLED HARDWARE SHOULD NOT REQUIRE TIGHT GRASPING, ETC.	PT-1 PORCELAIN TILE COVE BASE 6" X 12" X 3%"	STYLE: COTTO AMERICANA COVE BASE NO: AV173 COLOR: RED	CROSSVILLE		PRESENTATIVE: KATHLEEN SOMERVELL, (248) 7-4362	B. REAR SERVICE DOOR DEVICES C. MASTER KEY SYSTEMS	•	•	SCHEDULE.		
ROOM IDENTIFICATION SIGNAGE, WHEN PROVIDED, SHALL COMPLY W/LOCAL AUTHORITY. BOTTOM 10" AT ALL DOORS, EXCEPT AUTOMATIC DOORS, SHALL HAVE AN UNINTERRUPTED SURFACE.	TEC GROUT	COLOR: #944 LIGHT CHOCOLATE				D. STOREFRONT TEMPERED GLAZING E. STOREFRONT GLAZING SYSTEM	•	•	SEE STOREFRONT DETAILS ON SHEET A51		
DOOR HARDWARE SCHEDULE	PT-2 PORCELAIN TILE 12" X 12" X %"	STYLE: COTTO AMERICANA NO: AV173 COLOR: RED				3. MIRRORS		•	FOR MIRRORS, REFER TO FIXTURE PLAN FOR		
DOOR DESCRIPTION QUANTITY (EACH) MODEL FINISH MANUFACTURER SUPP. BY BY REMARKS	TEC GROUT	COLOR: #944 LIGHT CHOCOLATE	CDAOFWALL T	TENIANT C.C. CUE		A. MIRROR FIXTURES B. MIRROR GLASS	•	•	RESPONSIBILITÍES. REFER TO FINISH PLAN.		
HINGES THAGER TO THE TEST OF T	SLT-1 SLATWALL 3" O.C. SLT-2 SLATWALL	STYLE: STEEL SLATWALL FINISH: #303 BRIGHT GALVANIZED STYLE: CONSTRUCTION SERIES — OSB			WALLER: (360) 886-1260 WALLER: (360) 886-1260	DIVISION 9: FINISHES INTERIOR PARTITIONS — FRAMING AND GYP. BD.	•	•	REFER TO FLOOR PLAN.		
PUSHI BAR V V SERIES 47, 36" ANSI 630 ROCKWOOD C.C. C.C. TYPE 8 MOUNTING V PA-2313BC ANSI 689 YALE C.C. G.C. G.C. C.C. C.C. TYPE 8 MOUNTING		FINISH: CLEAR COAT WITH SILVER METAI INSERTS STYLE: LUGANO	L			RATED PARTITIONS — FRAMING AND GYP. BD. DEMISING PARTITIONS — GYP. BD.	•	•	REFER TO FLOOR PLAN. REFER TO FLOOR PLAN. G.C. TO PATCH GYP. BD.		
THRESHOLD 1 2727A72 MILL ALUM PEMKO 5CC G.G. 5CC 5CC 5CC 5CC 5CC 5CC 5CC 5CC 5CC 5C	54" WIDE	NO: UHM-LG-02 COLOR: MONTAGE		550	PRESENTATIVE: CHRISTY OPALKA, (313) 0-1714	STOREFRONT — FRAMING AND GYP. BD.	•	•	G.C. TO COORDINATE SIGNAGE WITH SIGNAGE CONTRACTOR AND ARCHITECT.	2	
HINGES 1½ PAIR 1255 ANSI 626 HAGER G.C. G.C. — 2 LEVERSET 1 ND80PD RHO ANSI 630 SCHLAGE G.C. STOREROOM LOCK FUNCTION	YB-1 VINYL BASE 4" HIGH VFXIA VINYX XUX	COLOR: #201 CHOCOLATE	BURKE FLOORING ARMSTRONG X	G.C. G.C.		NEUTRAL PIER — FRAMING, GYP. BD., FACING DRYWALL COLUMN ENCLOSURES	+ + •	•	REFER TO FLOOR PLAN. GFRG OR DRYWALL. COLUMNS BY G.C.		
WALL BUMPER 1 WS402CCV ANSI 626 IVES G.C. G.C. —		NO: TRO64 COLOR WOOD FINISH	WOLF CORPON TI	TENANT C.C. DED	DECENTATIVE COOTT HEGIED (74.7)	SUSPENDED GYP. BD. CEILING AND FRAMING SUSPENDED ACOUSTICAL CEILING AND SUSPENSION	•	•	IF REQUIRED BY PLANS.		
3 HARDWARE BY DOOR MANUFACTURER HINGES 1½ PAIR 1255 ANSI 626 HAGER G.C. G.C. G.C. -	WC-1 WALL COVERING 54" WIDE	PATTERN: BIRCH NO: G9339644 COLOR: WOODLAND		408	PRESENTATIVE: SCOTT HESLER, (317) 3-1723	PAINTING SHEET VINYL FLOORING AND BASE, VINYL TILE	•	•			
4 LEVERSET 1 ND50PD RHO ANSI F82 SCHLAGE G.C. G.C. ENTRANCE/OFFICE LOCK FUNCTION WALL BUMPER 1 WS402CCV ANSI 626 IVES G.C. G.C. –	WC-2 WALL COVERING 54" WIDE	PATTERN: T.B.D. NO: T.B.D. COLOR: T.B.D.		TENANT G.C.		STONE, PORCELAIN, AND OTHER HARD SURFACES REDUCERS AND TRANSITION STRIPS	•	•	REFER TO DETAILS.		7
HINGES 1½ PAIR 1255 ANSI 626 HAGER G.C. G.C	WC-3 WALL COVERING	CUSTOM WALL COVERING	BREWSTER TI	TENANT G.C. COC	ORDINATE WITH PROJECT MANAGER	BASE AND SHOE MOLD WAINSCOT (FRP)	•	•	REFER TO FINISH PLAN AND SCHEDULE. REFER TO FINISH SCHEDULE AND INTERIOR ELEVATIONS.	E E	씽
CLOSER 1 2713 ANSI 689 YALE G.C. G.C. — LEVERSET 1 ND80PD RHO ANSI 630 SCHLAGE G.C. G.C. ENTRANCE/OFFICE LOCK FUNCTION	=	LIGHTLY SANDED TO SMOOTH SURFACE WITH CLEAR MATTE/SATIN FINISH		TENANT G.C.		WALL COVERINGS	•	•	REFER TO FINISH SCHEDULE AND INTERIOR ELEVATIONS. REFER TO FINISH PLAN AND SCHEDULE, AND INTERIOR ELEVATIONS.		PAC
WALL BUMPER - WS402CCV ANSI 626 IVES G.C. G.C DEADBOLT 1 B571-626 ANSI 630 SCHLAGE G.C. G.C. OCCUPIED/UNOCCUPIED	WD-4 WOOD (STAIN-GRADE PINE) STAIN	COLOR: CLASSIC GRAY 271		TENANT G.C. SEE TENANT G.C.	ARCHITECTURAL PLANS FOR WOOD SIZE.	WALL TILE TILE ACCESSORIES	•	•	WHEN REQUIRED, REFER TO FINISH PLAN AND SCHEDULE. REFER TO FINISH PLAN.)AN 9837;
HINGES 3 PAIR 1279 - NRP ANSI 626 HAGER G.C. G.C CLOSER 2 3513M ANSI 689 YALE G.C. G.C	WD-5 1x4 WOOD TRIM	FINISH: SATIN COLOR		TENANT G.C. PRE	FINISHED	WALK-OFF MAT DIVISION 10: SPECIALTIES	•	•	REFER TO FINISH PLAN.		MERIC # 5(
KICK PLATE 2 8400, 12" X 34" ANSI 628 IVES G.C. G.C. - PANIC HARDWARE 1 2670 ANSI 628 VON DUPRIN G.C. G.C. -	STAIN	COLOR: EARLY AMERICAN		TENANT G.C.		STOREFRONT SIGN/SIGNAGE REAR SERVICE DOOR IDENTIFICATION	•		G.C. SHALL COORDINATE WITH SIGN CONTRACTOR.		2D S. ORE
6 DOOR VIEWER 1 60MM ABS SILVER ABS NEW-VUE G.C. G.C. WIDE-ANGLE, 2¾" LATCH GUARD 2 341D ANSI 630 HAGER G.C. G.C. G.C	WD-6 1x4 WOOD TRIM STAIN	- COLOR: DARK WALNUT		TENANT G.C. PRE		ACCESSIBILITY SIGNAGE INTERIOR SIGNAGE/PLAQUES	•	•	ADA SIGNAGE AS REQUIRED BY CODE.	S	94 P
THRESHOLD 1 2727A72 MILL ALUM. PEMKO G.C. G.C. — SWEEP 2 3151CN, 36" MILL ALUM. PEMKO G.C. G.C. G.C. —	RWD-1 RECLAIMED WOOD	_		G.C. G.C.		FIRE EXTINGUISHERS	•	•	TYPE AS REQUIRED PER APPLICABLE CODE. REFER TO SHEET A10.		
WEATHERSEALS 2 SETS HSS2000xS88BL BLACK PEMKO G.C. G.C. - HINGES 3 PAIR 1279 - NRP ANSI 626 HAGER G.C. G.C. -	PAINT SHEEN SCHEDUI	LE: FLAME SPREAD RATI	NG:		ABBREVIATIONS:	SAFE (MANAGER'S DESK) TOILET ROOM ACCESSORIES (PAPER TOWEL HOLDER, TOILET	•	•	VERIFY LOCATION WITH TENANT. REFER TO INTERIOR ELEVATIONS.	SMH	
CLOSER 2 3513M ANSI 689 YALE G.C. G.C. – KICK PLATE 2 8400, 12" X 34" ANSI 628 IVES G.C. G.C. –	WALLS BELOW PAINT LINE: EGGSH		RIOR		L.L LANDLORD	PAPER HOLDER, SOAP DISPENSER, SEAT COVER DISPENSERS) TOILET ROOM ACCESSORIES	•	•	REFER TO INTERIOR ELEVATIONS.		
PANIC HARDWARE 1 2670 ANSI 628 VON DUPRIN G.C. G.C. G.C. -	WALL ABOVE PAINT LINE: FLAT CEILING/DECK: FLAT	CORRIDORS AND ENCLOSURE FOR	OR XIT			GRAB BARS AND RESTROOM MIRROR WALL/MIRROR GRAPHICS (VINYL)	•	•	REFER TO INTERIOR ELEVATIONS. REFER TO INTERIOR ELEVATIONS.		
LATCH GUARD 2 341D ANSI 630 HAGER G.C. G.C	DOORS & TRIM: SEMI-C	ACCESS RAMPS:	CLASS C			LOCKERS BACKWRAP SIGN	•	•	G.C. TO SECURE TO FLOOR AND WALLS.	SCRIPTIO	
THRESHOLD 1 2727A72 MILL ALUM. PEMKO G.C.		*SMOKE DEVELOPED INDEX OF THAN 450		BE NO GREATER		DIVISION 12: FURNISHINGS CABINETS AND STORAGE	•		REFER TO FIXTURE PLAN.	JER COM	
WEATHERSEALS 2 SETS HSS2000xS88BL BLACK PEMKO G.C. G.C. - HINGES 1½ PAIR 1255 ANSI 626 HAGER G.C. G.C. -				L		SALES AREA FURNITURE CURTAINS, DRAPERIES, AND HARDWARE	•	•		CITY/OWN	
8 LEVERSET 1 ND80PD RHO ANSI 630 SCHLAGE G.C. G.C. STOREROOM LOCK FUNCTION	_					MISC. HARDWARE AND MERCHANDISE DISPLAY COUNTERTOPS	•	•	REFER TO FIXTURE PLAN. REFER TO FIXTURE PLAN.)ATE '03/24	
9 EXISTING TO REMAIN, G.C. TO REPLACE HARDWARE AS REQUIRED FOR PROPER FUNCTION.						SURFACE-MOUNTED STANDARDS, SHELVING AND BRACKETS IMAGES/GRAPHICS	•	•	REFER TO FIXTURE PLAN.	REV [ည
10 EXISTING TO REMAIN, G.C. TO PROVIDE NEW "BEST" 7-PIN CYLINDERS						FLOOR FIXTURES	•	•		30665	JOH / 24 DULE
HINGES 1½ PAIR 1255 ANSI 626 HAGER G.C. G.C. - 11 LEVERSET 1 ND80PD RHO ANSI 630 SCHLAGE G.C. G.C. STOREROOM LOCK FUNCTION						TRIM FOR STANDARDS SLATWALL TRIM FOR CLATWALL	•	•	REFER TO FIXTURE PLAN. REFER TO FIXTURE PLAN.	CT NO: 2	
WALL BUMPER 1 WS402CCV ANSI 626 IVES G.C. G.C. — 12 HARDWARE BY DOOR MANUFACTURER						TRIM FOR SLATWALL TRIM AND WOOD PLANKS FOR FITTING ROOM DOORS (SALES AREA SIDE)	•	•	REFER TO A61 SHEET.	PROJE	OHECKI CHECKI ISSUE O4/
						FITTING ROOM BENCH FITTING ROOM BENCH VENEER	•	•	REFER TO FIXTURE PLAN.		T10
G.C. TO SEND CUTSHEETS TO BOOT BARN FOR REVIEW PRIOR TO PURCHASING						THITHE NOON DENOTE VENEER	•	1 •	I	-	

PART 3 EXECUTION

3.01 PREPARATION:

D. Remove existing sod.

A. Remove surface rock.

B. Remove debris from site.

SECTION 02310 - EARTHWORK

A. Removal and storage of topsoil.

required during construction

drain prior to grading or excavation.

3.02 CLEARING:

3.03 REMOVAL:

PART 1 GENERAL

1.01 SECTION INCLUDES:

within the building.

factor (if applicable).

Excavation for detention pond.

B. Section 02230 - Site Clearing.

inverts, and slope gradients.

B. Protect building from damage.

friable material and debris.

2.03 SOURCE QUALITY CONTROL:

throughout the Work.

D. Topsoil: Topsoil excavated on-site.

A. Geotextile Fabric: Non-biodegradable, woven.

B. Stake and flag locations of known utilities.

place prior to starting earthwork.

B. Do not remove topsoil when wet.

until notified to resume work.

from draining into excavation.

drainage and protect from erosion.

C. Cut excavations clean with level bottoms.

G. Remove excess excavated material from site.

D. Do not remove wet subsoil.

A. Provide materials of each type from same source

A. Identify required lines, levels, contours, and datum.

D. Notify utility company to remove and relocate utilities.

A. Remove topsoil from areas to be further excavated,

C. Subgrades to be held to the specified depth below

sidewalks as shown on the drawings or otherwise

A. Excavate to accommodate new sidewalk and construction

B. Notify Program Manager/Project Manager of unexpected

subsurface conditions and discontinue affected work in area

D. Grade top perimeter of excavation to prevent surface water

backfill or fill. Place, grade, and shape stockpiles for proper

F. Remove excavated material that is unsuitable for re-use from

B. Employ a placement method that does not disturb or damage

settlement. Do not fill over porous, wet, frozen or spongy

D. Slope grade away from building minimum 2 inches in 10 ft,

unless noted otherwise. Make gradual grade changes. Blend

E. Stockpile satisfactory excavated material until required for

A. Fill up to subgrade elevations unless otherwise indicated.

C. Systematically fill to allow maximum time for natural

1 Verify subgrade has been contoured and compacted.

A. Top Surface of Subgrade: Plus or minus 1/10 foot from

A. Remove unused stockpiled subsoil. Grade stockpile area to

B. Leave site clean and raked, ready to receive landscaping.

END OF SECTION

A. ACI 211.1 - Standard Practice for Selecting Proportions for

B. ACI 304R — Guide for Measuring, Mixing, Transporting, and

Expansion Joint Filler for Concrete Paving and Structural

A. Mix Design: Submit for each type and class of conctete.

A. Obtain cementitious materials from same source throughout.

A. Provide one year warranty that all work has been done in

the work installed will fulfill the requirements of these

strict accordance with the drawings and specifications and

B. Any or all of the work which may prove to be defective within

one year from date of final acceptance by the Owner shall be

Construction (nonextruding and Resilient Bituminous Types);

For prior mix designs, submit copies of previous break tests.

Placing Concrete; American Concrete Institute International;

Institute International; 1991 (Reapproved 2002).

C. ASTM C 94/C 94M — Standard Specification for

D. ASTM D 1751 - Standard Specification for Preformed

Normal, Heavyweight, and Mass Concrete; American Concrete

B. Top Surface of Finish Grade: Plus or minus 1/2 inch.

B. Place topsoil where required to level finish grade.

A. General Fill: Subsoil excavated on—site.

A. Section 02221 - Demolition.

and rip rap.

and paving.

K. Finish grading.

1.03 DEFINITIONS:

1.04 SUBMITTALS:

1.05 QUALITY ASSURANCE:

1.06 PROJECT CONDITIONS:

PART 2 PRODUCTS

2.01 SOIL MATERIALS

organic matter.

2.02 EROSION CONTROL:

PART 3 EXECUTION

3.01 PREPARATION:

3.02 EROSION CONTROL:

3.03 ROUGH GRADING:

materials.

3.04 EXCAVATING:

3.05 FILLING:

other work.

3.06 FINISH GRADING:

3.07 TOLERANCES:

PART 1 GENERAL

1.02 REFERENCES

1.03 SUBMITTALS

1.05 WARRANTY

1.04 QUALITY ASSURANCE

specifications.

1.01 SECTION INCLUDES

A. Concrete sidewalks.

subgrade surfaces.

A. Before Finish Grading:

required elevation.

3.08 CLEANING AND PROTECTION:

prevent standing water.

SECTION 02751 - SITE CONCRETE

Ready-Mixed Concrete; 2004a

slope into level areas.

C. Place topsoil during dry weather.

operations.

1.02 RELATED SECTIONS:

A. Herbicide: "Roundup" by Monsanto chemical company.

A. Clear areas required for access to site and execution of

C. Apply herbicide to remaining stumps to inhibit growth.

B. Construction staking to control earthwork operations.

C. Provide temporary silt fencing and erosion control items as

D. Rough grading the site for site structures, building pads, and

E. Excavating for footings, slabs—on—grade, paving, and utilities

F. Reduction of all rippable rock materials encountered in the

course of work to sizes and grades suitable for rock fills

G. Ditching in areas of high moisture content to allow soils to

. Removal of excess and unsuitable soil (if applicable).

H. Borrow fill pit proctor testing and establishment of a shrinkage

J. Filling, backfilling, and compacting for footings, slabs—on—grade,

A. Common: All materials encountered on the site that can be

worked by acceptable construction practices using ordinary

construction equipment up to and including a single—tooth

C. Site Rock: Solid mineral material with a volume in excess

power shovel rated at three quarter yard capacity.

B. Finish Grade Elevations: Indicated on drawings.

ripper equipped crawler tractor equal to a Caterpillar D8 or a

of 1/3 cubic yard or solid material that cannot be removed

with a 3/4 cubic yard capacity power shovel without drilling.

A. Project Record Documents: Accurately record actual locations

of utilities remaining by horizontal dimensions, elevations or

3. Materials' Sources: Submit name of imported materials' source

A. Perform Work in accordance with State in which the project is

located, Department of Transportation standards.

A. Protect above and below grade utilities that remain.

B. Granular Fill — Gravel: Pit run stone; free of shale, clay,

C. Granular Fill — Pea Gravel: Natural stone; free of clay, shale,

C. Locate, identify, and protect utilities that remain from damage.

A. Temporary erosion control, if not already installed, shall take

re-landscaped, or re-graded, without mixing with foreign

B. Clear undergrowth and deadwood without disturbing subsoil.

A. Locate and identify utilities to remain.

repaired or replaced at no cost to the Owner. 1.06 ENVIRONMENTAL REQUIREMENTS: A. Do not place concrete when base surface temperature is less than 40 degrees F, or surface is wet or frozen.

PART 2 PRODUCTS 2.01 FORM MATERIALS: A. Wood or metal form material, profiled to suit conditions. B. Joint Filler: Preformed; non—extruding bituminous type (ASTM D 1751), 1) Thickness: 1/2 inch.

2.02 CONCRETE MATERIALS: A. Concrete Materials: As specified in Section 03300.

2.03 MIXING: A. Transit Mixers: Comply with ASTM C 94. PART 3 EXECUTION 3.01 EXAMINATION:

A. Place concrete in accordance with ACI 304R.

A. Align curb, gutter, and sidewalk joints.

for 7 days minimum after finishing.

A. Formed steel stud exterior wall framing.

B. Formed steel joist framing and bridging.

3.06 JOINTS:

3.07 FINISHING:

3.08 TOLERANCES:

3.09 PROTECTION:

PART 1 GENERAL

SG-971)

1.01 SECTION INCLUDES:

1.02 RELATED REQUIREMENTS:

miscellaneous framing

Iron and Steel Institute; 1996.

1.03 REFERENCE STANDARDS:

mechanical injury

are not disturbed during concrete placement.

and between predetermined construction joints.

B. Maximum Variation from True Position: 1/4 inch.

SECTION 05400 - COLD FORMED METAL FRAMING

A. Section 06100 — Rough Carpentry: Wood blocking and

A. AISI SG02-1 - North American Specification for the Design

B AISI SG-973 - Cold-Formed Steel Design Manual; American

Steel Institute; 2001 with 2004 supplement. (replaced

C. ASTM A 153/A 153M — Standard Specification for Zinc

Coating (Hot—Dip) on Iron and Steel Hardware; 2005.

E ASTM A 653/A 653M - Standard Specification for Steel

F ASTM C 955 - Standard Specification for Load-Bearing

G. AWS D1.1/D1.1M — Structural Welding Code — Steel;

(Galvannealed) by the Hot—Dip Process; 2006a.

Products and Metal Plaster Bases; 2006.

American Welding Society; 2006.

.04 SYSTEM DESCRIPTION:

intended openings.

criteria, limitations.

1.05 SUBMITTALS:

1.06 WARRANTY:

specifications.

2.01 FRAMING MATERIALS:

G90/Z275 coating.

Designation SS steel.

3.01 INSTALLATION OF STUDS:

studs is not permitted.

with wall stud spacing.

anchored to walls.

PART 1 - GENERAL

1.01 RELATED SECTIONS

PART 2- PRODUCTS

durability of 5005-H15.

unless otherwise indicated.

B. Miscellaneous materials: As follows:

2.01 MATERIALS

made inaccessible after erection.

PART 2 PRODUCTS

2.02 FASTENERS:

PART 3 EXECUTION

instructions.

1/360 of span.

. ASTM Å 123/A 123M — Standard Specification for Zinc

(Hot—Dip Galvanized) Coatings on Iron and Steel Products;

Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated

(Transverse and Axial) Steel Studs, Runners (Tracks), and

Bracing or Bridging for Screw Application of Gypsum Panel

A. Horizontal Deflection: Design to permit maximum deflection of

deflection of building structural members, and clearances of

B. Design wall system to provide for movement of components

without damage, failure of joint seals, undue stress on

fasteners, or other detrimental effects when subject to

C. Design system to accommodate construction tolerances,

A. Product Data: Provide four copies of data on standard

B. Manufacturer's Installation Instructions: Indicate special

procedures, conditions requiring special attention.

framing members; describe materials and finish, product

A. Provide one year warranty that all work has been done in

the work installed will fulfill the requirements of these

B. Any or all of the work which may prove to be defective

shall be repaired or replaced at no cost to the Owner.

A. Studs and Track: ASTM C 955; studs formed to channel,

matching nominal width and compatible height.

Hot dip galvanized per ASTM A 153/A 153M.

studs to tracks using clip and tie method.

full strength and achieve design requirements.

B. Anchorage Devices: Power actuated.

C. Welding: In conformance with AWS D1.1.

C. Galvanized in accordance with ASTM A 653/A 653M

A. Install components in accordance with manufacturers'

strict accordance with the drawings and specifications and

within one year from date of final acceptance by the Owner

C", or "Sigma" shape with punched web; U—shaped track in

B. Gage and depth: As required to meet specified performance

D. Provide components fabricated from ASTM A 1008/A 1008M,

A. Self-Drilling, Self-Tapping Screws, Bolts, Nuts and Washers:

B. Align floor and ceiling tracks; locate to wall layout. Secure

in place with fasteners at maximum 24 inches on center.

Coordinate installation of sealant with floor and ceiling tracks.

C. Place studs at 16 inches on center; not more than 2 inches

from abutting walls and at each side of openings. Connect

E. Install load bearing studs full length in one piece. Splicing of

D. Construct corners using minimum of three studs. Install

double studs at wall openings, door and window jambs.

F. Install load bearing studs, brace, and reinforce to develop

G. Coordinate placement of insulation in multiple stud spaces

Provide deflection allowance in stud track, directly below

horizontal building framing at non-load bearing framing.

K. Install framing between studs for attachment of mechanical

Touch—up field welds and damaged galvanized surfaces with

END OF SECTION

A. The following sections contain requirements that relate to this

1) Division 7 Section "Flashing and Sheet Metal" for items

2) Division 8 Section "Hollow Metal Doors and Frames" for

stock doors and frames made of cold—formed sheet metal.

A. Sheet metal materials: Use materials selected for their surface

) Galvanized sheet steel: ASTM A526, G90, mill phosphatized.

1) Fasteners: Concealed, except as otherwise indicated, of type

1) Anchors and inserts: Furnish as required for installation in

flatness, smoothness and freedom from surface blemishes.

recommended by aluminum producer or finisher for use

and alloy to match metal to be fastened; use Phillips

flat-head screws for exposed fasteners where permitted,

intended and finish indicated but not less than strength and

2) Aluminum sheet: ASTM B209, alloy and temper

I. Attach cross studs to studs for attachment of fixtures

and electrical items, and to prevent stud rotation.

SECTION 05580 - SHEET METAL FABRACATIONS

made of sheet metal for flashing purposes.

H. Install intermediate studs above and below openings to align

seasonal or cyclic day/night temperature ranges.

of Cold-Formed Steel Structural Members; American Iron and

A. Immediately after placement, protect pavement from

of travel with troweled and radiused edge 1/4 inch.

A. Maximum Variation of Surface Flatness: 1/4 inch in 10 ft.

premature drying, excessive hot or cold temperatures, and

B. Do not permit pedestrian or vehicular traffic over pavement

END OF SECTION

A. Sidewalk Paving: Light broom, texture perpendicular to direction

A. Verify compacted subgrade is acceptable and ready to support paving and imposed loads. B. Verify gradients and elevations of base are correct. 3.02 SUBBASE: A. Prepare subbase in accordance with State of which the project is located Highways standards.

thickness as detailed or if not indicated 0.0516 inch, with 3.03 PREPARATION: weather tight joints. A. Moisten base to minimize absorption of water from fresh 3) Incorporate gaskets for continuous seal to abutting 3.04 FORMING: . Finishes, general: Comply with NAAMM "Metal Finishes Manual" for application and designation of finishes. Protect finished A. Place and secure forms to correct location, dimension, profile, and gradient.

B. Place joint filler vertical in position, in straight lines. Secure to). Aluminum finishes: As follows (finish designations conform with formwork during concrete placement. system established by Aluminum Association): 1) Color: As selected by Architect from within standard industry C. Place expansion joints as indicated on plans. Align curb, gutter, and sidewalk joints. colors and color density range. 3.01 INSTALLATION D. Place joint filler between paving components and building or other appurtenances, or a different day's pour. A. Locate and place miscellaneous sheet metal items plumb and 3.05 PLACING CONCRETE:

level, in alignment with, and securely attached to adjoining construction. 3.02 PROTECTION B. Ensure reinforcement, inserts, embedded parts, formed joints A. Protect aluminum surfaces from corrosion where in contact C. Place concrete continuously over the full width of the panel with dissimilar metals, concrete or masonry by coating contact surfaces with zinc chromate primer to bituminous paint. B. Touch-up shop painted surfaces after installation, using same materials used in shop.

other construction. Use nonferrous or hot—dip galvanized units

2) Flexible cellular neoprene gaskets: ASTM D1056, Type 1,

A. Fabricate items from sheet metal of type, minimum nominal

3. Closures and trim: Formed to tightly close with adjoining

2) Metal for Interior Installations: Galvanized steel sheet,

thickness, and finish as well as to dimensions and details

indicated, to produce units of strength required for intended

use and with exposed surfaces which are smooth, flat and

1) Form sheet metal in maximum lengths and keep joints to

2) Continuously weld all joints and seams, except as otherwise

1) Metal for Exterior Installation: Galvanized steel sheet, 0.0478

obtain airtight seal for application indicated.

minimum, with cut edges concealed.

construction, from the following metal:

Class A, Grade as recommended by gasket manufacturer to

for exterior installation.

PART 3 - EXECUTION

3.01 FABRICATION, GENERAL

free of imperfections.

SECTION 06100 - ROUGH CARPENTRY

installation of new work.

attachment of other work.

2.01 LUMBER STANDARDS AND REQUIREMENTS:

A. Moisture Content: Not to exceed 16 percent for framing

B. Grade Stamps: Factory mark each piece of lumber with grade

rule requirements and identifying grading agency, grade,

species, moisture content at time of surfacing, and mill.

of each piece, or omit grade stamps entirely and issue

C. Quality: Sound, thoroughly seasoned, well manufactured and

American Softwood Lumber Standard and with applicable

grading rules of inspection agencies certified by American

Lumber Standards Committee's (ALSC) Board of Review.

products not manufactured under PS 1 provisions, with

applicable APA Performance Standard for type of panel

E. Plywood Product Standards: Comply with PS 1 (A199.1) or, for

A. Furnish grades and species of wood as indicated below, except

Furnish dressed lumber, S4S, unless otherwise indicated.

B. Wood Blocking, Nailers, and Edging Stripes: Standard and

C. Exterior Plywood: Structural 1 C-C EXT-APA Preservative

1) Provide wood blocking and nailers of size and shape

indicated and required to secure other work or equipment in

place. Include rough hardware such as necessary bolts and

or nailers on steel, concrete, or masonry shall be bolted in

3. Plywood Backing Panels: For mounting electrical or telephone

equipment, provide fire retardant treated plywood panels with

grade designation, APA C—D PLUGGED INT with exterior glue,

standards, complying with applicable Federal Specifications for

devices. Provide metal hangers and framing anchors of the

size and type recommended by the manufacturer for each use

A. Fasteners and Anchorages: Provide size, type, material and

finish as indicated and as recommended by applicable

nails, staples, screws, bolts, nuts, washers and anchoring

1) Where rough carpentry work is exposed to weather, in

A. Unless noted to be fire retardant treated, provide preservative

wood grounds, nailing strips, blocking, edging strips and

Zinc Metal Arsenite (ZMA) Dry salt 0.3

Chromated Zinc Chloride Dry salt 0.3

C. Provide fire retardant treatment for all interior wood and

plywood, concealed or exposed. Comply with AWPA standards

tested in accordance with UL 723, ASTM E 84, or NFPA 355.

Wherever possible treat after fabrication to minimize cutting

for pressure impregnation with fire retardant chemicals to

achieve a flame spread rating of not more than 25 when

and jointing of treated material. Paint surfaces cut after

treatment with heavy brush coat of same fire retardant

A. Make door closures tight, with door and lock. Do not fasten to

B. Provide batter boards; erect and maintain as long as required,

established building lines and elevations by means of batter

boards and bench marks. Establish and lay out lines, levels

and partitions as the work progresses, as a guide to the

A. Discard units of material with defects that might impair quality

of work, and units that are too small to use in fabricating

B. Set carpentry work to required levels and lines, with members

plumb, level and true, neatly cut and fitted in accordance with

work with minimum joints or optimum joint arrangement.

the details. Erect all members in as long lengths as

ground contact, or in area of high relative humidity, provide

fasteners and anchorages with a hot dip zinc coating (ASTM A

treatment for all exterior wood, concealed or exposed, including

LBS. PER CUBIC FOOT

Dry salt 1.0

Dry salt 0.3

anchoring devices to secure the blocking and nailers. Blocking

grades and species identified for specific items shall govern.

free from warp that cannot be corrected in the process of

bridging or nailing. Woodwork exposed to view shall be dressed.

). Lumber Standards: Manufacture lumber to comply with PS 20

stamp of inspection agency evidencing compliance with grading

1) For exposed lumber, apply grade stamps to ends or back

certificate of grade compliance from inspection agency in lieu

PART 2- PRODUCTS

of grade stamp.

indicated

Better Fir, Spruce or Pine.

2.03 MISCELLANEOUS LUMBER:

treated in accordance with AWPA C27.

A. Wood Blocking, Nailers, and Grounds:

not less than 1/2-inch thick.

including recommended nails.

2.05 PRESERVATIVE AND FIRE RETARDANT TREATMENT:

B. Net retention of preservative as follows:

Wolman Salts (Tenalith)

finished frame of permanent door.

2.04 MISCELLANEOUS MATERIALS:

plywood, per AWPA C9.

PRESERVATIVE

2.06 TEMPORARY PROTECTIONS:

various trades.

3.01 INSTALLATION. GENERAL:

PART 3 - EXECUTION

inc Chloride

2.02 LUMBER:

PART 1 - GENERAL

1.01 SUMMARY: A. Furnish all labor, materials, equipment and services necessary complete all carpentry work indicated on the drawings and specified herein. B. The extent of carpentry work shall be indicated of the

drawings, and is defined to include, but not limited to the following: 1) Wood sheathing 2) Temporary walls and partitions, covers, protections and sound, dust and weather barriers for the building as well as temporary fences and protective devices for the site, the public, adjacent property, and equipment. 3) Treated wood blocking, and nailers, as necessary for the

4) Hollow metal frames (installation only). 5) Finish and rough hardware (installation only). . The following related items are specified in other sections of this specification 1) Section 03300 Cast—in—place Concrete — forming and) Section 06200 Finish Carpentry.

Section 06400 Architectural Woodwork.) Section 07210 Building Insulation. 5) Section 07530 Roofing — roof insulation. 1.02 SUBMITTALS: A. Wood Treatment Data: Submit treatment manufacturer's instruction for proper use of each type of treated materials. 1) Pressure Treatment: For each type specified, include certification by treating plant stating chemicals and process

used, net amount of preservative retained and conformance with applicable standards. 2) Fire Retardant Treatment: Include certification by treating plant that treatment material complies with governing ordinances and that treatment will not bleed through finished

2.02 MATERIALS: 1.03 PRODUCT HANDLING: A. Lumber for Transparent Finish (Stained or Clear): Use pieces A. Delivery and Storage: Keep materials under cover and dry. made of solid lumber stock. B. Lumber for Painted Finish: At contractor's option, use pieces Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber, plywood, and other panels. that are either glued up lumber or solid stock. E. Exterior Plywood (For Painted Finish): Any softwood species, provide air circulation within and around stacks and under exterior type, Medium Density Overlay (MDO/EXT—APA), of temporary coverings including polyethylene and similar materials. 1.04 PROJECT CONDITIONS:

thickness indicated. Moisture content of all millwork except as otherwise noted. A. Coordination: Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of furring, not exceed 10%. nailers, blocking, grounds and similar supports to allow proper Unexposed Cores, Backings, Blocking and Stripping: Sound,

stable, seasoned, kiln dried softwood. Interior Standing and Running Trim: For trim in form of boards and worked products, provide lumber complying with the followina reauirements: 1) Species: Ponderosa Pine, WWPA. Select Grade: B and better. 5) Texture: Surfaced (smooth)

practicable, with joints as inconspicuous as possible to allow

for shrinkage. Miter outside corners and cope inside corners.

fastening as sown and as required by recognized standards.

Countersink nail heads on exposed carpentry work and fill

). Use common wire nails, except as otherwise indicated. Use

view or will receive finish materials. Make tight connections

predrill as required

otherwise shown.

3.02 CLEAN UP:

PART 1 - GENERAL

1.02 SUMMARY:

other sections.

1.03 QUALITY ASSURANCE:

on a concealed surface.

1.04 JOB CONDITIONS:

in installation areas.

2.01 WOOD PRODUCT QUALITY STANDARDS:

Lumber Association (NHLA) rules.

Institute (AWI) Quality Standards.

PART 2 - PRODUCTS

1.01 RELATED DOCUMENTS:

the specifications:

Wood Nailers, and Blocking:

between members. Install fasteners without splitting of wood,

1) Provide wherever shown and where required for screwing or

2) Attach to substrates as required to support applied loading.

Where shelving, wall cabinets and similar wall hung equipment

is shown, nest 2 x 4 wood studs inside metal studs at 32

inches on center. Extend wood studs from floor to top of

END OF SECTION

A. The following related items are specified in other sections of

A. Furnish all labor, materials, equipment and services necessary

B. Finish Carpentry includes carpentry work which is exposed to

C. The extent of millwork is indicated on the drawings and is

defined to include, but is not limited to the following:

A. Factory mark each piece of lumber and plywood with type,

marking from surfaces to receive transparent finishes and

A. Conditioning: Advise contractor of temperature and humidity

A. Softwood Lumber Standards: Comply with PS 20 and with

applicable grading rules of the respective grading and

C. Hardwood Lumber Standards: Comply with National Hardwood

Architectural Woodworking Institute (AWI) Quality Standards.

comply with specified provision of Architectural Woodwork

Woodworking Standard: Where indicated for specific products

agencies for the species and product indicated.

Glued Up Lumber Standards: Comply with PA 56.

B. Plywood Standards: Comply with PS 1/ANSI A 199.1.

Woodworking Standards: Comply with the provisions of

requirements for finished carpentry installation areas. Do not

install finish carpentry until required temperature and relative

submit mill certification that material has been inspected and

graded in accordance with requirements if it cannot be marked

grade, mill and grading agency identification; omit

to complete all millwork, wood fabrications and finish carpentry

view, is non—structural, and which is not specified as part of

) Section 07900 — Joint Fillers and Sealants

4) Section 08110 — Metal Doors and Frames

6) Section 10800 — Toilet Room Accessories

indicated on the drawings and specified herein.

attachment of other work. Form to shapes as shown and cut

as required for true line and level of work to be attached.

Countersink bolts and nuts flush with surfaces, unless

partition. Screw attached wood studs to metal studs.

A. Clean premises on a daily basis. Remove rubbish from the

Coordinate location with other work involved.

do not burn rubbish on the premises.

1) Section 06100 - Rough Carpentry

5) Section 08710 - Finish Hardware

1) Interior standing and running trim.

Fiberalas Reinforced Paneling (FRP).

SECTION 06200 - FINISH CARPENTRY

3) Section 09900 — Painting

Securely attach carpentry work to substrate by anchoring and

finishing nails for finish work. Select fasteners of size that will

not penetrate members where opposite side will be exposed to

4) Lumber for Painted Finish: glued—up lumber or solid lumber stock. . Wood Molding Patterns: For stock molding patterns included in Wood Molding and Millwork Producers Association WM 7 and graded under WM 4. Provide the following grade based on finish indicated and fabricated from species specified. 1) Moldings for Painted Finish: P-grade.

H. Shelving: 3/4 inch plywood with fir veneer both sides and hardwood edgebands all exposed edges. Fit to angle frames where detailed on the drawings. Moisture content of all millwork except as otherwise noted, shall not exceed 10%.

J. Unexposed Cores, Backings, Blocking and Stripping: Sound, stable, seasoned, kiln dried softwood. K. Fiberglass Reinforced Paneling shall be .060" thick, as

manufactured by the Masonite Corporation or approved equal complete with matching moldings. Color shall be as scheduled. Sheets shall be furnished full height with no horizontal joints. 2.03 PRESERVATIVE TREATMENT: A. Provide preservative treatment for all exterior plywood, per

AWPA C 9. 2.04 FABRICATION: A. Conform to design and details shown. Where practicable, finish and assemble work at mill. Finish millwork and trim smooth

and free from machine or tool marks that will show through the finish. Set all nail heads to receive plastic wood putty. B. Make all joints tight and form to conceal shrinkage. Shop miter 4 inches or more from heel to point shall be glued and locked. Make shop joints of interior work with waterproof glue or hot glue under pressure.

. Running finish shall be long lengths and jointed only where solid fastenings can be made. End joints in built up members shall be well distributed. Fabricate standing and running trim to the profiles shown on the drawings, accurately mitered, turned to walls where shown,

PART 3 - EXECUTION 3.01 PREPARATION: A. Condition wood materials to average prevailing humidity conditions in installation areas prior to installing. 3.02 INSTALLATION:

with all sharp corners slightly rounded.

A. Install work with joints true and tight with all items firmly attached and assembled in accordance with Drawings. 1) Standing and Running Trim: Install with a minimum number of joints possible, using full length pieces to the greatest possible extent. Stagger joints in adjacent and related members. Cope at returns, miter at corners, to produce tight fitting joints with full surface contact throughout length of

joint. Use joints for end to end joints. . Fastening: 1) Discard units of material which are unsound, warped, bowed, twisted, improperly treated, not adequately seasoned or too small to fabricate work with minimum of joints or optimum jointing arrangements, or which are of defective manufacture with respect to surfaces, sizes or patterns 2) Install the work plumb, level, true and straight with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/8 inch in 8'-0" for plumb and level

countertops; and with 1/16" maximum offset in flush adjoining 1/8" maximum offsets in revealed adjoining 3) Scribe and cut work to fit adjoining work and refinish cut surfaces or repair damage to finish at cuts. Neatly cope inside corners; do not miter 4) Anchor finish carpentry work to anchorage devices or blocking built in or directly attached to substrates. Secure to fasteners and blind nailing as required, use fine finishing nails for exposed nailing, countersunk and filled flush with finished

grounds, stripping and blocking countersunk, concealed surface, and matching final finish where transparent finish is indicated. 5) On exposed interior finish work, set nails for putty. 6) Install screws with a screwdriver. Do not drive into place. 7) Exterior plywood: Secure with galvanized casing nails with heads driven flush but not set. Do not install until both faces and all edges, including fresh cuts, have received the first

coat of specified paint or satin finish 3.03 INSTALLATION OF MATERIAL FURNISHED BY OTHERS: A. Steel frames: Set frames plumb and square, firmly anchored in place in accordance with fabricator's instructions. Neatly caulk perimeters of exterior frames with caulking and remove

B. Install all other items furnished for installation hereunder

excess caulk.

1) At the end of each working day, or more often if necessary, thoroughly sweep all surfaces where refuse from the 2) Remove refuse to the area of the job site set aside for its 3) Upon completion of the work, thoroughly broom clean

floors. Wipe down and clean all other surfaces. Repair damaged and defective finish carpentry works wherever possible to eliminate defects functionally and visually; where not possible to repair properly, replace woodwork. Adjust for uniform appearance. Clean finish carpentry work on exposed and semi-exposed surfaces. Touch up shop applied finishes to restore damaged

or soiled areas. E. Remove all cartons, debris, sawdust, scraps, etc and leave spaces clear and all millwork ready for Owner's use. Protection: Installer of finish carpentry work shall advise Contractor of final protection and maintained conditions necessary to ensure that work will be without damage or deterioration at Date of Substantial Completion.

and items not otherwise installed under other Sections. Install

instructions. Install such items accurately set to line and level,

manufactured items in accordance with manufacturer's

firmly anchored to substrate.

sawdust, cut ends, and debris.

3.04 ADJÚSTMENT, CLEAN UP AND PROTECTION:

END OF SECTION SECTION 06200 - FINISH CARPENTRY

PART 1 — GENERAL 1.01 RELATED DOCUMENTS: A. The following related items are specified in other sections of the specifications: 1) Section 06200 — Finish Carpentry

indicated on the drawings and specified herein.

2) Section 09900 - Painting

1.02 SUMMARY: A. Work includes, but is not necessarily limited to, all plastic laminate covered case work, counter tops, shelving, and related wood work components, as shown on the drawings and described below. B. Furnish all labor, materials, equipment and services necessary to complete all millwork, wood fabrications and finish carpentry

1.03 QUALITY ASSURANCE: A. Manufacturer shall have produced the specified products for a period of five (5) years prior to beginning work of this section, and shall have the capability to produce the specified products to the delivery and quantity criteria of the project. B. For fabrication and installation of work, use only personnel who are thoroughly trained and experienced in the skills required. Have similar applications of the specified products installed within one year prior to beginning work of this section. Personnel must be completely familiar with the manufacturers' recommended methods of installation as well as the

requirements of this work. .04 REFERENCES: A. Organization and Trade Standards. 1) AWI (Architectural Woodwork Institute) "Manual of Millwork," latest edition.

humidity conditions have been stabilized and will be maintained 2.01 PLASTIC COVERED CASEWORK: A. General: 1) All casework shall comply with referenced AWI Standards and as specified. 2) All laminated plastic shall be the product of a single

2) National Particleboard Association, NPA 8086.

PART 2 - PRODUCTS

manufacturer. B. The same manufacturer shall supply all hardware of a single C. Product Characteristics: Adjustable Shelf Standards

1) Manufacturer: Louis and Company or approved equal 2.02 OTHER PRODUCTS: A. Provide all other products necessary for complete installation and operation. Such products shall be subject to the review of

the Architect. 2.03 PLASTIC LAMINATE CASEWORK FABRICATION: A. Shop fabricate casework to the greatest extent possible. Disassemble only as necessary for shipping and handling. B. Fabricate in accordance with construction details and dimensions shown on the drawings and approved shop

drawings. Verify all dimensions at the building prior to fabrication. Notify the Architect of any differences shown on the drawings and actual dimensions at the building before proceeding with the work. . Provide access panels and cutouts where indicated or required for other trades.

D. Shelf Standards: Rout end panels, back panels and dividers approximately 3/4-inch wide x 1/4-inch deep to receive shelf standards (flush mounted) where adjustable shelving is shown. Finish all exterior exposed surfaces with high-pressure laminate unless otherwise indicated. Laminate plastic to particle board core with balancing sheet using manufacturer's recommended

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS: A. Prior to fabrication and installation of architectural woodwork, carefully inspect the installed work of all other trades and verify installation may properly commence. 1) Verify that all work can be installed in strict accordance with all pertinent codes and regulations, the original design, reviewed submittals, and manufacturers' recommendations.

3.02 INSTALLATION: A. Install all woodwork in accordance with referenced AWI Standards, approved submittals, and as specified. B. Install all components into solid blocking plates or framing.

Use of toggle bolts and "Molly" bolts for all attachment not acceptable. Minimize use of adhesive on—site to maximum extent possible. D. Woodwork and Counter Top Installation:

1) Install per AWI, Custom grade 3.03 CLEANING AND ADJUSTMENT: A. Dust all woodwork by vacuuming prior to project completion. B. Clean and polish all surfaces and hardware.

SECTION 07410 - PREFORMED METAL WALL PANELS

END OF SECTION

A. Provide all labor, materials, equipment and services necessary to complete installation of all preformed metal roof panels

shown on drawings and specified herein. B. Extent of preformed metal panel wall system work is indicated on drawings and by provisions of this section, and is defined to include wall panel, flashing, and accessories integrally related to wall panel installation. Types of preformed metal panel wall required for project include, but are not limited to the following: 1) Preformed, prefinished standing seam metal wall and

flashinas. C. The following related items are specified in other sections of the specifications: Cold Form Steel Framing.

) Miscellaneous metal fabrication. 3) Rough carpentry. 4) Vapor barrier 5) Sealants.

.02 RÉFERENCES:

A. American Iron & Steel Institute (AISI) Specification for the Design of Cold formed Steel Structural Members. B. ASTM A-525 Steel Sheet, Zinc-Coated (Galvanized) C. ASTM E-283-84 . ASTM E-331-86

ASTM E-330 (Modified) SMACNA — Architectural Sheet Metal Manual. G. Building Materials Directory — Underwriter's Laboratories, Test Procedure 580. 1.03 QUALITY ASSURANCE:

A. Installer qualifications: Engage an experienced installer to perform installation of preformed metal panel roofina work who has specialized in the installation of preformed metal panel wall systems similar to that required for this project and who is acceptable to manufacturer of primary materials. 1.04 SUBMITTALS:

A. Product data: Submit manufacturer's technical product data, installation instructions and recommendations for each type of preformed metal panel roofing product required. Include data substantiating that materials comply with requirements. B. Submit a sample of wall panel, complete with finish for

1.05 PROJECT CONDITIONS: A. Weather condition limitations: Proceed with wall panel work only when existing and forecasted weather conditions will permit work to be performed in accordance with manufacturers recommendations and warranty requirements. .06 DELIVERY, STORAGE, AND HANDLING:

A. Upon receipt of panels and other materials, installer shall examine the shipment for damage and completeness. B. Panels should be stored in a clean, dry place. One end should be elevated to allow moisture to run off. C. Stack all materials to prevent damage and to allow for adequate ventilation. .07 WARRANTIES:

A. Manufacturer's warranty: Submit executed copy of preformed metal panel roofing manufacturer's standard Limited Service Warranty agreement including flashing endorsement, signed by an authorized representative of preformed metal panel roofing system manufacturer, on form which was published with

product literature as of date of contract documents, for the following period of time: 1) Paint finish shall have a twenty—year quarantee against cracking, peeling and fade (not to exceed 5 N.B.S. units). PART 2 - PRODUCTS 2.01 MATERIALS:

A. Keep the premises in a neat, safe, and orderly condition at all times during execution of the work, free from accumulation of A. Standing Seam Panels 24GA Panels shall have a 1-1/2" high vertical leg, spaced 16-1/2" on center. Color as shown on plans. Coordinate with Architect and Owner. 1) Standing seam to be of an interlocking, "snap-lock" design

2) Panels shall be site—formed with Portable Roll Former in continuous length of wall panel. 3) Vinyl Weatherseal to be factory/machine—installed over Continuous Cee Rib. B. Finish shall be (full strenath Kynar 500 Flouropolymer coating)

applied by the manufacturer on a continuous coil coating line, with a sop side dry film thickness of 0.70 to 0.90 mil. over 0.25 to 0.35 mil. prime coat, to provide a total dry film thickness of 0.95 to 1.25 mil. Bottom side shall be coated with primer with a dry film thickness of 0.25 mil. Finish shall conform to all tests for adhesion, flexibility, and longevity as specified by the Kynar 500-finish supplier. C. Strippable film shall be liquid applies to the topside of the

painted coil to protect the finish during fabrication, shipping and filed handling. This strippable film must be removed before D. Accessory Materials:

1) Fasteners: Galvanized Steel with washers where required. 2) Sealant: As specified in Section 07900. E. Fabrications: 1) All exposed adjacent flashing shall be of the same materia

and finish as the roof panels. P) Hem all exposed edges of flashing on underside, 1/2 inch. PART 3 - EXECUTION 3.01 EXAMINATION: A. Examine substrate surfaces to receive preformed metal panel wall system and associated work and conditions under which wall panels will be installed. Do not proceed with wall panel until unsatisfactory conditions have been corrected in a manner

acceptable to installer. .02 INSTALLATION, GENERAL: A. Comply with manufacturers standard instructions and conform to standards set forth in the Architectural Sheet Metal Manual published by SMACNA, in order to achieve a watertight

B. Install starter and edge trim before installing wall panels. C. Remove protective strippable film prior to installation of roof D. Attach panels using manufacturer's standard clips and fasteners, spaced in accordance with approved shop drawings. E. Do not allow panels or trim to come into contact with

F. Remove and replace any panels or components that are damaged beyond successful repair. 3.02 CLEANING: A. Clean any grease, finger marks or stains from the panels per

manufacturer's recommendations. B. Remove all scrap and construction debris from the site.

SECTION 07600 - FLASHING AND SHEET METAL

PART 1 - GENERAL 1.01 SUMMARY:

dissimilar materials.

A. Furnish all labor, materials, services and equipment necessary to complete all flashings and sheet metal work shown on the drawings and specified herein. B. The extent of flashings and sheet metal work is shown on drawings and is defined to include, but is not limited to the

1) Sheet metal flashings and counterflashings. Sheet metal copings at parapets.) Scupper and downspouts.

1.02 QUALITY ASSURANCE: A. Conform to profiles and sizes and comply with the Architectural Sheet Metal Manual by SMACNA for each general 1.03 SUBMITTALS: A. Product Data: Flashing, Sheet Metal, Accessories: Submit

manufacturer's product data, installation instructions and general recommendations for each specified sheet material and fabricated product 1.04 JOB CONDITIONS: A. Coordinate work of this section with interfacing and adjoining

work for proper sequencing of each installation. Ensure best possible weather resistance and durability of work and protection of materials and finishes. PART 2 - PRODUCTS

2.01 FLASHING AND SHEET METAL MATERIALS: A. Aluminum: ASTM B 209, alloy 3003, temper H14, AA-C22A41 clear anodized finish; 0.032 inch thick (20 gauge).

B. Solder: for use with steel, provide 50-50 tin/lead solder (ASTM B 32), with rosin flux. C. Fasteners: Same metal as flashing/sheet metal or, other noncorrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with materials being fastened.

D Cleats: Same material as sheet being anchored, 2 inches wide, punched for 2 anchors. E Mastic Sealant: Polyisobutylene; nonhardening, nonskinning, nondrying, nonmigrating sealant.

F. Metal Accessories: Provide sheet metal clips, straps, anchoring devices and similar accessory units as required for installation of work matching or compatible with material being installed, noncorrosive, size and gauge required for performance. G. Elastomeric Sealant: Generic type recommended by

manufacturer of metal and fabricator of components being sealed; comply with FS TT-S-0027, TT-S-00230, or TT-S-001543.

2.02 FABRICATED UNITS: A. General Metal Fabrication: Shop fabricate work to greatest

extent possible. Comply with details shown, and with applicable requirements of SMACNA Architectural Sheet Metal Manual and other recognized industry practices. Fabricate for waterproof and weather resistant performance, with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Form work to fit substrates. Comply with material manufacturer instructions and recommendations for forming material. Form exposed sheet metal work without excessive oil canning, buckling and tool

marks, true to line and levels indicated, and with exposed edges folded back to form hems. 3. Seams: Fabricate nonmoving seams in sheet metal with flat lock seams. For metal other than aluminum, tin edges to be seamed, form seams, and solder. Form aluminum seams with epoxy seam sealer; rivet joints for additional strength where

required. Cap seal rivets. Expansion Provisions: Where lapped or bayonet type expansion provisions in work cannot be used, or would not be sufficiently water/weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).

D Sealant Joints: Where movable, nonexpansion type joints are indicated or required for proper performance of work form metal to provide for proper installation of elastomeric sealant, in compliance with SMACNA standards. PART 3 - EXECUTION

3.01 INSTALLATION REQUIREMENTS: A. Examine substrate and conditions under which sheet metal work will be installed, and notify Contractor in writing of unsatisfactory conditions. Do not proceed with installation until conditions have been corrected in an acceptable manner.

B. General: Comply with manufacturer's installation instructions and recommendations, and with SMACNA Architectural Sheet Metal Manual. Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible and set units true to line and level as indicated. Install work with laps, joints and seams which will be permanently watertight and weatherproof. C. Underlayment: Where sheet metal is to be installed directly on cementitious or wood substrates, install a slip sheet of red

rosin paper and a course of polyethylene underlayment. D. Bed flanges of work in a thick coat of bituminous roofing cement where required for waterproof performance. E. Install reglets to receive counterflashing in manner and by methods indicated

1) Install counter flashing in reglets, either by snap in seal arrangement, or by wedging in place for anchorage and filling reglet with mastic or elastomeric sealant, as indicated and depending on degree of sealant exposure. F. Edge Strips: Provide continuous edge strips (cleats) at edges and drip strips for attaching exposed terminating edge of sheet metal in lengths of 8'0" or 10'0". Set edge strips

straight and true and secure in place with nails of proper size and spaced not more than 6 inches apart. G. Anchor work in place with non-corrosive fasteners, adhesives, setting compounds, tapes and other materials and devices as recommended by manufacturer of each material or system. Provide for thermal expansion and building movements. Comply with recommendations of Architectural Sheet Metal Manual by

H. Sheet Metal Copings and Roof Edges: Install sheet metal coping or roof edge at all parapets and canopies as indicated 1) Form in $10^{\circ}0^{\circ} + /-$ lengths. Lap adjoining sheets 3 inches. 2) Install continuous cleats at exterior and interior of parapet

where indicated and anchor as specified. 3) Provide separation sheets as required and install sheet metal copings, locking coping to cleats. Top of coping shall be fabricated in one piece 4) Where counterflashing is indicated to join coping at interior side, use continuous cleat and lock seam method of

installation.

3.02 CLEANING AND PROTECTION:

A. Clean exposed metal surfaces, removing substances that might cause corrosion of metal or deterioration of finishes. B. Protection: Installer shall advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction, to ensure that work will be without damage or deterioration, other than natural weathering, at time of substantial completion.

END OF SECTION

SECTION 08110 - STEEL DOORS AND FRAMES

1) Section 08710 - Finish hardware

PART 1 - GENERAL 1.01 RELATED DOCUMENTS: A. The following related items are specified in other section of

the specifications:

1.02 SUMMARY:

to complete all steel doors and frames shown on the drawings and specified herein B. The extent of steel doors and frames, as shown on the drawings and schedules, is defined to include, but not limited to the following: 1) Steel doors and frames for interior and exterior locations

A. Provide all labor, materials, equipment, and services necessary

2) Accessories required for a complete installation. 1.03 QUALITY ASSURANCE: A. Provide doors and frames complying with Steel Door Institute Recommended Specifications: Standard Steel Doors and Frames (ANSI/SDI100) and as herein specified.

1.04 SUBMITTALS: A. Product Data: Submit manufacturer's technical product data substantiating that products comply with requirements. Submit manufacturer's fabrication data and installation instructions. B. Shop drawings: Submit for fabrication and installation of steel doors and frames. Include details of each frame type, elevations of door design types, conditions at openings, details of construction, location and installation requirements of finish hardware and reinforcement, and details of joints and

connections. Show anchorage and accessory items. .05 DELIVERY, STORAGE AND HANDLING: A. Deliver hollow metal work carted or crated to provide protection during transit and job storage. Provide additional sealed plastic wrapping for factory finished doors. 3. Inspect hollow metal work upon delivery for damage. Minor damage may be repaired, provided refinished items are equal

in all respect to new work and acceptable to owner

C. Store doors and frames at building site under cover. Place units on minimum 4-inch high wood blocking. Avoid use of non-vented plastic or canvas shelters that could create humidity chamber. If cardboard wrapper on door becomes wet, remove carton immediately. Provide 1/4-inch spaces between stacked doors to promote air circulation. 06 PROJECT CONDITIONS

representative. Otherwise, remove and replace damaged items

A. Examine conditions under which steel door and frames are to be installed and notify the Contractor of any conditions detrimental to the proper and timely completion of the work. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.

PART 2 - PRODUCTS 2.01 ACCEPTABLE MANUFACTURERS: A. Manufacturers: Subject to compliance with requirements, provide steel doors and frames by one of the following:

1) Kewanee Corp.

2) Approved Equal 2.02 MATERIALS: A. Cold Rolled Steel Sheets: Commercial quality carbon steel. complying with ASTM A 366 and ASTM A 568. B. Galvanized Steel Sheets: Zinc coated carbon steel sheets of

commercial quality, complying with ASTM A 526, with ASTM A 525, G60 zinc coated, mill phosphated. C. Supports and Anchors: Fabricate from minimum 16 gage sheet metal. Galvanize after fabrication. Units to be built into exterior walls, complying with ASTM A 153, Class B. D. Inserts, Bolts and fasteners: Manufacturer's standard units,

except hot dip galvanized items to be built into exterior walls, complying with ASTM A 153, Class C or D as applicable. . Primer: Rust-inhibitive enamel or paint, either air-drying or baking, suitable as a base for specified finish paints complying with ANSI A224.1, "Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.' 2.03 FABRICATION, GENERAL:

A. Fabricate steel door and frame units to be rigid, neat in appearance, and free from defects, warp, or buckle. Accurately form metal to required sizes and profiles. Wherever practical, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory assembled before shipment, to assure proper assembly at project site. Use of metallic fillers to conceal manufacturing

defects is unacceptable. 1) Interior Doors: Minimum 18 gage faces. B. Fabricate exposed faces of doors and panels, including stiles and rails of non—flush units, from cold rolled steel. Fabricate frames, concealed stiffeners, reinforcement, edge channels, louvers and molding from either cold rolled or hot

rolled steel (at fabricator's option). . Exposed fasteners: Unless otherwise indicated, provide countersunk flat Phillips heads for exposed screws and bolts . Finish Hardware Preparation: Prepare doors and frames to receive mortised and concealed finish hardware, include cutouts, in accordance with final Finish Hardware Schedule and templates provided by hardware supplier. Comply with applicable requirements of ANSI A115 series specification for door and frame preparation for hardware.

1) Drilling and tapping for surface applied hardware may be done at the project site. 2) Locate finish hardware as shown on final shop drawings, in accordance with recommended locations for Builder's Hardware, published by National Builder's Hardware

Association, and as otherwise specified. 2.04 STEEL DOORS: A. Provide flush design steel doors, 1-3/4 inch thick, seamless hollow construction, unless otherwise indicated. For single

acting doors, bevel both vertical edges 1/8 inch in 2 inches. Provide integral formed astragals where indicated. B. Reinforce doors with rigid tubular steel frame where stiles and rails are less than 8 inches wide. Form tubular frame with 16—gauge steel, welded to outer sheets. Finish Hardware Reinforcement: Reinforce doors for finish hardware installation.

. Interior Doors: Fabricate interior doors of two(2) outer cold rolled, stretcher leveled steel sheets not less than 18 gauge. Construct doors with smooth, flush surfaces, without visible joints or seams on exposed faces or stile edges, except around glazed or louvered panel inserts. 1) Reinforce tops and bottoms of doors with 18 gauge, horizontal steel channels, welded continuously to outer sheets.

2.05 STEEL FRAMES: A Provide metal frame for doors. Conceal fastening, unless otherwise indicated. Fabricate frames of cold rolled furniture steel. Fabricate exterior frames using galvanized steel. 1) Interior Frames: 16 gauge for opening 4'0" wide and less. 14 gauge for opening over 4'0" wide. B. Fabricate frame with mitered, reinforced, and continuously welded corners. Knock down frames are not acceptable.

Finish Hardware Reinforcement: Provide reinforcement per manufacturer's instructions. . Jamb Anchors: Furnish jamb anchors as required to secure frames to adjacent construction, as follows: 1) Except as otherwise specified, furnish at least 3 anchors per jamb for openings 7'0" high and less; 4 anchors per jamb for openings 8'0" high and less; one additional anchor per jamb for each 24 inches or fraction thereof for openings

over 8'0" high. 2) Gypsum Board/Metal Stud Construction: Manufacturer's standard channel type steel stud anchors, welded to frames. . Floor Anchors: Provide 14 gauge galvanized sheet steel floor anchors for each jamb and mullion. 5. Structural Reinforcing Members: Provide structural reinforcing

members as part of frame assembly where indicated at mullions. heads and other locations G. Fabricate removable assemblies for field installation that allows for easy removal of equipment access.

PART 3 - EXECUTION 3.01 INSTALLATION: A. Install standard steel doors, frames, and accessories in accordance with final shop drawings, manufacturer's data, and

as herein specified. B. Placing Frames: Comply with provisions of SDI-105 Recommended Erection Instructions For Steel Frames, unless otherwise indicated.

1) In metal stud partitions, install at least 3 wall anchors per jamb at hinge and strike levels. In open steel stud partitions, place studs in wall anchor notches and wire tie. In closed steel stud partitions, attach wall anchors to studs with tapping screws. . Door Installation: Fit hollow metal doors accurately in frames. within clearances specified in SDI-100.

3.02 ADJUST AND CLEAN: A. Prime coat Touch Up: Immediately after erection, sand smooth any rusted or damaged areas of prime coat and apply touch up of compatible air drying primer. . Protection Removal: Immediately prior to final inspection, remove protective plastic wrappings from shop finished doors.

items, leaving steel doors and frames undamaged and in

defective work, including doors and frames that are bowed,

warped, twisted, cupped or otherwise unacceptable.

complete and proper operating conditions. Remove and replace

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. Final Adjustments: Check and readjust operating finish hardware

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PART 1 - GENERAL 1.02 SUMMARY:

- A. Provide all labor, materials, equipment and services necessary to complete all finish hardware shown on the drawings and specified herein.
- B. Extent of finish hardware required is indicated on drawing and in schedules and specified herein. C. Should items of hardware not definitely specified be required for completion of the work, provide type and quality suitable to the service required, and of similar type and quality to specified hardware used in comparable applications.
- 1.03 SUBMITTALS: A. Product data: Submit manufacturer's technical product data fo each item of hardware in accordance with Division 1. Include whatever information may be necessary to show compliance with requirements, and include instructions for installation and for maintenance of operating parts and finish.
- B. Hardware schedule: Submit six(6) copies of the final hardware schedule in manner indicated below. Coordinate hardware with doors, frames and related work to ensure proper size. thickness, hand function and finish of hardware. Based on builders hardware indicated, organize hardware schedule into "hardware sets" indicating complete designations of every item required for each door or opening. Employ NBHA and ASAHC Standards. Include the following information 1) Type, style, function, size and finish of each hardware item.
-) Name and manufacturer of each item. Fastenings and other pertinent information. 4) Location of hardware set cross referenced to indications or
- drawings both on floor plans and in door schedule. 5) Explanation of all abbreviations, symbols, codes, etc. contained in schedule. 6) Mounting locations for hardware.

schedule, product data, samples,

- 7) Door and frame sizes and materials. 8) Horizontal schedules will not be accepted. C. Submittal sequence: Submit schedule at earliest possible date, particularly where acceptance of hardware schedule must precede fabrication of other work (e.g., hollow metal frames) which is critical in the project construction schedule. Include
- hardware schedule. D. Keying schedule: Submit separate detailed keying schedule. Obtain keying instructions for the Owner Representative. E. Templates: Furnish hardware templates to each fabricator of doors, frames and other work to be factory prepared for the installation of hardware. Upon request, check shop drawings of such other work to confirm that adequate provisions are made

other information essential to the coordinated review of

shop drawings of other work affected by finish hardware, and

- for proper location and installation of hardware. 1.05 PRODUCT HANDLING: A. Tag each item or package separately, with identification related to final hardware schedule, and include basic installation
- instructions with each item or package. B. Provide secure lock up for hardware delivered to the project, but not yet installed. Control handling and installation of hardware items which are not immediately replaceable, so that completion of the work will not be delayed by hardware losses, both before and after installation.
- 1.06 PROJECT CONDITIONS: A. Coordination: Coordinate hardware with other work. Tag each item or package separately, with identification related to the final hardware schedule, and include basic installation instructions in the package. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function. Deliver individually packaged hardware items at the proper times to the proper locations (shop or project site) for installation. PART 2 - PRODUCTS

2.01 SCHEDULED HARDWARES

- A. Requirements for design, grade, function, finish, size and other distinctive qualities of each type of finish hardware are indicated in the hardware schedule on architectural plans. 2.02 MATERIALS: A. Hand of door: Drawings show direction of slide, swing or hand of each door leaf. Furnish each item of hardware for proper
- installation and operation of door movement as shown. B. Manufacturer's name plate: Do not use manufacturer's products which have manufacturer's name or trade name displayed in a visible location (omit removable nameplates), except in conjunction with required UL labels and as otherwise acceptable to Owner Representative. 1) Manufacturer's identification will be permitted on rim of lock cylinders only.
- Base metals: Produce hardware units of basic metal and forming method inducted, using manufacturer's standard metal alloy, composition, temper and hardness, but in no case of lesser commercially recognized quality than specified for the applicable hardware units by applicable ANSI A156 series standard for each type hardware item and with ANSI A156.18 for finish designations indicated. Do not furnish optional materials or forming methods for those indicted, except as otherwise specified.
- D. Fasteners: Provide hardware manufactured to conform to published templates generally prepared for machine screw installation. Do not provide hardware which has been prepared for self tapping sheet metal screws, except as specifically indicated. E. Furnish screws for installation, with each hardware item.
- Provide Phillips flat head screws except as otherwise indicated Finished exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of such other work as closely as possible, including prepared for paint in surfaces to receive painted finish. F. Provide concealed fasteners for hardware units that are
- exposed when door is closed, except to the extent no standard units of the type specified are available with concealed fasteners. Do not use thru bolts for installation where bolt head or nut on opposite face is exposed in other work, except where it is not feasible to adequately reinforce the work. In such cases, provide sleeves for each thru bolt or use sex screw fasteners. 2.03 HINGES, BUTTS AND PIVOTS:

A. Templates: Provide only template produced units. 2.04 LOCKS AND KEYING:

- A. Locksets and latches shall be cylindrical type, product on one manufacturer. B. Supplier to meet with Owner to determine keying. Provide 6 pin system with uncommon keyway. Provide quantity of keys as required.
- 2.05 EXIT DEVICES: A. Provide Von Duprin, Sargent, Precision. 2.06 OVERHEAD DOOR CLOSERS:
- A. All closures shall meet handicapped requirements. Manufacturer's representative shall check and adjust all closers after installation is complete and provide Owner with pamphlets and brochures explaining each type of closer. Provide LCN, Sargent, Corbin, Russwin.
- 2.07 KICK PLATES: A. All kick and armor plates shall be B&S 16 gauge or 18 gauge, with four(4) sides beveled. B. Fasteners: Provide manufacturer's standard exposed fasteners
- screws or self tapping screws. 2.08 DOOR SILENCER: A. Furnish as applicable to meet specifications; floor stops and wall stops as required to suit conditions. Provide risers where

for trim units (kick plates and similar units); either machine

2.09 THRESHOLDS AND WEATHERSTRIPPING:

A. Provide as indicated in hardware schedule. 2.10 HARDWARE FINISHES: A. Provide matching finishes for hardware units at each door or

- opening, to the greatest extent possible and except as otherwise indicated. Reduce differences in color and textures as much as commercially possible where the base metal or metal forming process is different for individual units of hardware exposed at the same door or opening. In general, match items to the manufacturer's standard finish for the latch and lock set for color and texture. B. Provide finishes that match those established by BHMA.
- C. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness and other qualities complying with manufacturer's standards, but in no case less than specified for the applicable units of hardware by referenced standards.
- D. The designations used in schedules and elsewhere to indicate hardware finishes are the industry recognized standard commercial finishes, except as otherwise noted. PART 3 - EXECUTION

3.01 INSTALLATION: A. Mount hardware units at heights indicated in Recommended

- Locations for Builders Hardware for Standard Steel Doors and Frames by the Door and Hardware Institute, except as specifically indicated or required to comply with governing regulations, and except as may be otherwise directed by Owner Representative.
- B. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protections with finishing work specified in the Division 9 sections. Do not install surface mounted items until finishes have been completed on the substrate.
- C. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- D. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- 3.02 ADJUST AND CLEAN: A. Adjust and check each operating item of hardware and each

door, to ensure proper operation or function of every unit. Replace those that cannot be adjusted to operate freely and smoothly as intended for the application made. B. Clean adjacent surfaces soiled by hardware installation.

C. Final adjustment: Wherever hardware installation is made more

or area, return to the work during the week prior to

final adjustment of hardware.

SECTION 09250 - GYPSUM DRYWALL

load-bearing steel framing.

not limited to the following:

PART 1 - GENERAL

1.02 SUMMARY:

.03 DEFINITIONS:

1.05 SUBMITTALS:

or supplier.

referencedstandards

a sinale manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING:

manufacturer's recommendations.

the following requirements:

corrosion-resistant coating.

(uncoated) metal and depth.

applications indicated.

Edges: Tapered

2.03 TRIM ACCESSORIES:

in ASTM C 1047:

indicated.

otherwise indicated.

applied over it.

2.05 MISCELLANEOUS MATERIALS:

following applications:

PART 3 - EXECUTION

3.01 EXAMINATION:

possible.

Thickness: as indicated.

requirements indicated below:

trim unless otherwise indicated.

2.04 JOINT TREATMENT MATERIALS:

2.02 GYPSUM BOARD:

) Depth: 6 inches where indicated.

2.01 STEEL FRAMING FOR WALLS AND PARTITIONS:

1.04 QUALITY ASSURANCE:

product specified

beads and trim.

PART 2 - PRODUCTS

1.07 PROJECT CONDITIONS:

1.01 RELATED DOCUMENTS:

than one month prior to acceptance or occupancy of a space

END OF SECTION

A. The following sections contain requirements related to this

1) Division 5 Section "Cold—Formed Metal Framing" for

a) Gypsum sheathing applied over steel framing.

A. Furnish all labor, materials, equipment and services

indicated on the drawings and specified herein.

installed as substrates for ceramic tile.

2) Division 6 Section "Rough Carpentry" for the following:

3) Division 9 Section "Tile" for cementitious backer units

B. The extent of gypsum drywall and metal stud partitions is

1) Gypsum drywall and screw type metal stud system.

A. Gypsum Board Construction Terminology: Refer to ASTM C

A. Single Source Responsibility: Obtain each type of gypsum

A. Product data from manufacturers for each type of

A. Deliver materials in original packages, containers or

B. Store materials inside under cover and keep them dry and

surface contamination, corrosion, construction traffic and other

causes. Neatly stack gypsum boards flat to prevent sagging.

environmental conditions for application and finishing gypsum

1) Component Sizes and Spacings: As indicated but not less

nan that required to comply with ASTM C 754 under the

following maximum deflections and lateral loading conditions.

board to comply with ASTM C 840 and with gypsum board

surfaces. Do not bend or otherwise damage metal corner

A. Environmental Conditions, General: Establish and maintain

A. General: Provide steel framing members complying with

) Maximum Deflection: L/240 at 5 lbf per sq. ft.

B. Steel Studs and Runners: ASTM C 645, with flange edges of

inch wide minimum lip (return) and complying with the

Thickness: 0.0179 inch, unless otherwise indicated.

) Depth: 3-5/8 inches, unless otherwise indicated.

C. Fasteners for Metal Framing: Provide fasteners of type,

properties required to fasten steel framing and furring

recommendations of gypsum drywall manufacturers for

maximum lengths available to minimize end to end joints.

A. General: Provide gypsum board of types indicated in

A. Accessories for Interior Installation: Corner beads, edge

metal complying with the following requirements:

processes or with aluminum or rolled zinc.

trim and control joints complying with ASTM C 1047 and

2) Sheet steel coated with zinc by hot—dip or electrolytic

1) Material: Formed metal or metal combined with paper, with

3) Shapes indicated below by reference to Fig. 1 designations

4) Cornerbead on outside corners, unless otherwise indicated.

5) LC-bead with both face and back flanges; face flange

formed to receive joint compound. Use LC-beads for edge

840 and recommendations of manufacturer of both gypsum

1) Use pressure sensitive or staple—attached open—weave glass

fiber reinforcing tape with compatible joint compound where

recommended by manufacturer of gypsum board and joint

factory—packaged, job—mixed, chemical—hardening powder

taping compound only for taping and filling only, use

2) For prefilling gypsum board joints, use formulation

3) For topping compound, use sandable formulation.

A. General: Provide auxiliary materials for gypsum drywall

B. Steel drill screws complying with ASTM C 1002 for the

recommendations of gypsum board manufacturer.

1) Where setting—type joint compounds are indicated as a

formulation that is compatible with other joint compounds

recommended by gypsum board manufacturer for this purpose.

construction that comply with referenced standards and the

1) Fastening gypsum board to steel members less than 0.03

C. Steel drill screws complying with ASTM C 954 for fastening

A. Examine substrates to which drywall construction attaches

with installation until unsatisfactory conditions have been

A. Steel Framing Installation Standard: Install steel framing to

B. Install supplementary framing, blocking and bracing at

3.03 APPLICATION AND FINISHING OF GYPSUM BOARD, GENERAL:

A. Gypsum Board Application and Finishing Standard: Install

3.02 INSTALLATION OF STEEL FRAMING, GENERAL:

that apply to framing installation

by United States Gypsum Co.

in alternate courses of board.

gypsum board to steel members from 0.033 to 0.112 inch

or abuts, preset hollow metal frames, cast in anchors, and

structural framing, with Installer present, for compliance with

requirements for installation tolerances and other conditions

comply with ASTM C 754 and with ASTM C 840 requirements

penetrations in the work and for support of fixtures, equipment

services, heavy trim, grab bars, toilet accessories, furnishings,

and similar construction to comply with details indicated and

none available, with Gypsum Construction Handbook published

and finish gypsum board to comply with ASTM C 840 and GA

and ceilings as possible, and stagger not less than 16 inches

together for a light contact at edges and ends with not more

than 1/16—inch open space between boards. Do not force into

B. Locate exposed end butt joints as far from center of walls

C. Install wall/partition boards in manner that minimizes the

number of end butt joints or avoids them entirely where

D. Install exposed gypsum board with face side out. Do not

install imperfect, damaged or damp boards. Butt boards

E. Locate either edge or end joints over supports, except in

with recommendations of gypsum board manufacturer, or if

affecting performance of drywall construction. Do not proceed

A. Provide materials complying with ASTM C 475, ASTM C

treatment materials for application indicated.

products formulated for uses indicated.

. Setting Type Joint Compounds for Gypsum Board:

board and joint treatment materials for the application

B. Joint tape for Gypsum Board: Paper reinforcing tape, unless

Provide gypsum board in thickness indicated.

) Type: Regular, unless otherwise indicated.

B. Gypsum Wallboard: ASTM C 36 and as follows:

following requirements for minimum thickness of base

studs bent back 90 degrees and doubled over to form 3/16

material, size, corrosion resistance, holding power and other

members securely to substrates involved; complying with the

3) Protective Coating: Manufacturers standard

C. Handle gypsum boards to prevent damage to edges, ends and

protected against damage from weather, direct sunlight,

) Drywall finishing (joint tape and compound treatment).

) All necessary items and accessories for a complete

11 and GA 505 for definitions of terms for gypsum board

construction not otherwise defined in this section or other

board, steel framing and related joint treatment materials from

4) Division 9 Section "Painting, finishing and wall coverings".

necessary to complete all gypsum drywall and stud framing

indicated on these drawings and is defined to include, but is

- acceptance or occupancy, and make final check and framed openings where possible. Attach gypsum board to steel studs to that leading edge or adjustment of all hardware items in such space or area. Clean end of each board is attached to open (unsupported) edge o operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to stud flange first. compensate for final operation of heating and ventilating). Instruct Owner's personnel in proper adjustment and maintenance of hardware and hardware finishes, during the
 - - . Attach gypsum board to supplementary framing and blocking provided for additional support at openings and cutouts. H. Spot grout hollow metal door frames for hollow metal doors and doors over 32 inches wide. Apply spot grout at each jamb anchor clip just before inserting board into frame. H. Space fasteners in gypsum boards in accordance with

horizontal applications or where intermediate supports or

Position boards so those like edges join. Tapered edges

gypsum board back blocking is provided behind end joints.

on apposite sides of partitions. Avoid joists at corners of

against tapered edges and mill cut or field cut ends against

mill cut of field cut ends. Do no place tapered edges against

referenced gypsum board application and finishing standard and

- manufacturer's recommendations 3.04 INSTALLATION OF DRYWALL TRIM ACCESSORIES: A. General: Where feasible, use the same fasteners to
- anchor trim accessory flanges as required to fasten gypsum board to the supports. Otherwise, fasten flanges to comply with manufacturer's recommendations. 3. Install corner beads at external corners. 3.05 PROTECTION AND CLEAN-UP:
- A. Promptly remove any residual joint compound from adjacent surfaces. B. Provide final protection and maintain conditions, in a
- manner suitable to Installer, which ensures gypsum drywall construction being without damage or deterioration at time o substantial completion. . After completion of drywall installation, remove all debris and equipment from the area, protect work from damage or deterioration until acceptance of the work.

END OF SECTION

SECTION 09300 - FLOOR TILE PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Paver tile for thinset floor applications. B. Tile edging material. C. Crack isolation membrane.
- 1.02 REFERENCES: A. ANSI A108 Series/A118 Series/A136.1 — American National Standard Specifications for the Installation of Ceramic Tile (Compendium): 1992 1) ANSI A108.10 — American National Standard Specifications for Installation of Grout in Tilework; 1992.
- B. TCA (HB) Handbook for Ceramic Tile Installation; Tile Council of America, Inc.; 1997. 1.03 SUBMITTALS: A. Shop Drawings: Indicate tile layout.
- B. Product Data: Provide four copies of instructions for using arouts, isolation membranes, and adhesives. C. Samples: Provide three full size samples of each tile bundles bearing brand name and identification of manufacturer
 - illustrating pattern, color variations and texture. Provide three samples of grout illustrating color and texture. . Manufacturer's Certificate: Certify that products meet or exceed specified requirements
 - Maintenance Data: Provide two copies to include recommended cleaning methods, cleaning materials, stain removal methods, polishes, and waxes. 1.04 QUALITY ASSURANCE: A. Perform work in accordance with TCA Handbook and ANSI A108
 - Series/A118. B. Installer Qualifications: Company specializing in performing the work of this section with minimum 3 years experience. 1.05 DELIVERY, STORAGE, AND HANDLING: A. Protect adhesives from freezing or overheating in accordance
 - with manufacturer's instructions. 1.06 ENVIRONMENTAL REQUIREMENTS: A. Do not install adhesives in an unventilated environment. B. Maintain ambient and substrate temperature of 50 degrees
 - 1.07 EXTRA MATERIALS: A. Provide 2 percent of each size, color, and surface finish of tile specified, but not less than 10 of each type. PART 2 - PRODUCTS
 - 2.01 TILE: A. Manufacturers: Refer to room finish schedule. 2.02 CRACK ISOLATION MEMBRANE:
 - A. Mapei: Product: Mapelastic SM B. The Noble Company: Product: Nobleseal CIS C. Custom Building Products: Product: CrackBuster crack prevention underlayment) Schluter: Product: DITRA
 - 2.03 ADHESIVE MATERIALS: A. Manufacturers: 1) W.R. Bonsal Co.
 - 2) Bostik. Custom Building Products. B. Organic Adhesive: ANSI A136.1, thinset bond type; use Type I in areas subject to prolonged moisture exposure. C. Epoxy Adhesive: ANSI A118.3, thinset bond type.
 - D. Tile Setting Adhesive: Elastomeric, waterproof, liquid applied, for use on wall tile only. 2.04 GROUT MATERIALS: A. Refer to room finish schedule
 - 2.05 ACCESSORY MATERIALS: A. Refer to room finish schedule PART 3 - EXECUTION 3.01 EXAMINATION:
 - A. Verify that concrete sub-floor surfaces are ready for tile installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by tile manufacturer and setting materials manufacturer. B. Verify that required floor-mounted utilities are in correct

location 3.02 PREPARATION:

- A. Protect surrounding work from damage. B. Vacuum clean surfaces and damp clean. C. Seal and prime surface with Primer Patch and Filler TA-861.Allow primer to dry to a clear film before applying
- isolation membrane. D. Install Crack Isolation Membrane over entire surface as recommended by the manufacuturer. Allow to cure to walkable hardness before setting tile.
- . Prepare substrate surfaces for adhesive installation in accordance with adhesive manufacturer's instructions. 3.03 INSTALLATION — GENERAL: A. Install tile and grout in accordance with applicable
- manufacturer's instructions, and TCA Handbook recommendations. B. Lay tile to pattern indicated. Do not interrupt tile pattern through openings.
- . Place edge strips at exposed tile edges. D. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners neatly.

requirements of ANSI A108.1 through A108.10.

- E. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make joints watertight, without voids, cracks, excess mortar, or excess grout. 5. Sound tile after setting. Replace hollow sounding units. G. Allow tile to set for a minimum of 48 hours prior to grouting
- H. Grout tile joints. I. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes. 3.04 INSTALLATION - FLOORS - THIN-SET METHODS:
- A. Over exterior concrete substrates, install in accordance with TCA Handbook Method F102, with standard grout. B. Over interior concrete substrates, install in accordance with TCA Handbook Method F113, dry-set or latex-portland cement bond coat, with standard grout, unless otherwise indicated. 3.05 CLEANING:
- 3.06 PROTECTION OF FINISHED WORK: A. Do not permit traffic over finished floor surface for 4 days after installation.

SECTION 09650 - RESILIENT FLOORING

A. Clean tile and grout surfaces.

PART 1 - GENERAL 1.01 SECTION INCLUDES:

- A. Linoleum sheet flooring B. Resilient base. C. Installation accessories
- 1.02 REFERENCE STANDARDS: A. ASTM F 710 — Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring: 2005. B. ASTM F 1861 - Standard Specification for Resilient Wall
- Base; 2002. C. FS SS-T-312 - Tile, Floor: Asphalt, Rubber, Vinyl, and Vinyl Composition; Federal Specifications and Standards; Revision B, 1974, and Amendment 1, 1979. 1.03 SUBMITTALS:
- A. Product Data: Provide four copies of data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- B. Verification Samples: Submit three samples, 2 x 2 inch in size illustrating color and pattern for each resilient flooring and one sample for each base and transition strip. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule
- 1.04 WARRANTY A. Provide limited five(5) year warranty.

for cleaning, stripping, and re-waxing.

- 1.05 DELIVERY, STORAGE, AND HANDLING: A. Delivered in unopened cartons with clear and legible
- A. Maintain temperature in storage area between 55° F and 90° cut edges or ends. Stagger vertical joints over different studs B. Store materials for not less than 48 hours prior to to achieve temperature stability. Thereafter, maintain
 - conditions above 55° F 1.07 EXTRA MATERIALS:
 - installation in area of installation at a temperature of 70° F A. Provide 24 sq. ft. of flooring, 12 lineal feet of base, of each type and color specified.
 - A. Linoleum Sheet Flooring: Homogeneous wear layer bonded to backing, with color and pattern through wear layer 1) 3.2 mm homogeneous floor covering of all natural materials consisting of linseed oil, cork, wood flour, resin binders, dry pigments, mixed and calendered onto natural
 - jute backing. 2) Pattern and color shall extend throughout total thickness of material. Backing: Jute fabric. 4) Sheet Width: 79 inch, minimum. 5) Pattern: As scheduled
 - 6) Manufacturers: a. Refer to Room Finish Schedule 2.02 MATERIALS - TILE FLOORING:

A. Refer to Room Finish Schedule

2.03 MATERIALS - WALK OFF MAT:

identification.

PART 2 - PRODUCTS

thickness:

location

2.01 MATERIALS - SHEET FLOORING:

1.06 FIELD CONDITIONS:

- A. Refer to Room Finish Schedule. 2.04 MATERIALS - BASE: A. Coved and straight set—on type, 4" high rubber, as manufactured by Goodrich Flooring Co., or approved equal.
- B. Include all necessary returns at corners, door jambs, closers, C. Adhesive as recommended by tile manufacturer.

2.05 COMPONENTS - TRANSITION STRIPS A. Refer to Room Finish Schedule. 2.06 ACCESSORIES:

- A. Subfloor Filler: White premix latex; type recommended by adhesive material manufacturer. B. Primers, Adhesives, and Seaming Materials: Waterproof; types recommended by flooring manufacturer. . Moldings and Edge Strips: As scheduled.
- . Filler for Coved Base: Plastic. E. Sealer and Wax: Types recommended by flooring manufacturer. PART 3 - EXECUTION 3.01 EXAMINATION:
- A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive resilient flooring. B. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of adhesive materials
- to sub-floor surfaces. . Verify that concrete sub-floor surfaces are ready for resilient flooring installation by testing for moisture emission rate and alkalinity in accordance with ASTM F 710; obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.

D. Verify that required floor—mounted utilities are in correct

- 3.02 PREPARATION A. Remove sub-floor ridges and bumps. Fill minor low spots, cracks, joints, holes, and other defects with sub-floor filler to achieve smooth, flat, hard surface. B. Prohibit traffic until filler is cured. . Clean substrate.
- . Apply primer as required to prevent "bleed—through" or interference with adhesion by substances that cannot be Remove any imperfections or other defects and fill base
- substrate to achieve a smooth surface to avoid telegraphing 3.03 INSTALLATION - SHEET FLOORING A. Install in accordance with manufacturer's instructions. B. Spread only enough adhesive to permit installation of
- materials before initial set. C. Set flooring in place, press with heavy roller to attain full adhesion. D. Lay flooring with joints and seams parallel to longer room dimensions, to produce minimum number of seams. Lay
- match patterns carefully at seams. . Double cut sheet at seams. F. Lay flooring with tightly butted seams, without any seam sealer unless otherwise indicated.

out seams to avoid widths less than 1/3 of roll width;

- G. Double cut sheet; provide heat welded seams. H. Use Marmoweld color matched welding rod as manufactured by Forbo for heat welded seams. terminate flooring under centerline of door.
- Where floor finishes are different on opposite sides of door, J. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated. Secure resilient strips by adhesive. K. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
- Immediately after installation is completed, initial maintenance procedures must be implemented. See manufacturer's maintenance instructions for details. 3.04 INSTALLATION - TILE FLOORING A. Install in accordance with manufacturer's instructions.
- B. Mix tile from container to ensure shade variations are consistent when tile is placed. C. Spread only enough adhesive to permit installation of materials before initial set.
- D. Set flooring in place, press with heavy roller to attain full adhesion. E. Lay flooring with joints and seams parallel to building lines to produce symmetrical tile pattern. F. Install tile to grid pattern. Allow minimum 1/2 full size tile
- width at room or area perimeter. 3. Where floor finishes are different on opposite sides of door, terminate flooring under centerline of door. H. Install edge strips at unprotected or exposed edges,
- where flooring terminates, and where indicated. I. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints. 3.05 INSTALLATION - WALK OFF MAT
- A. Install according to manufacturer's instructions 3.06 INSTALLATION - BASE A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints. B. Miter internal corners. At external corners, use
- premolded units. At exposed ends, use premolded units. C. Install base on solid backing. Bond tightly to wall and floor D. Press base in place with roller with top edge level and
- bottom edge in contact with floor. E. Scribe and fit to door frames, walls and other interruptions. 3.07 CLEANING A. Remove excess adhesive from floor, base, and wall surfaces without damage. B. Clean, seal, and wax resilient flooring products in accordance
- with manufacturer's instructions. 3.08 PROTECTION A. Prohibit traffic on resilient flooring for 48 hours after installation.

END OF SECTION

3.09 SCHEDULE A. Refer to Drawings.

SECTION 09680 - CARPET

1.04 QUALITY ASSURANCE:

PART 1 - GENERAL 1.01 SECTION INCLUDES: A. Carpet, fully adhered. B. Accessories

1.02 REFERENCE STANDARDS: A. ASTM D 2859 — Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials; B. ASTM E 84 — Standard Test Method for Surface Burning Characteristics of Building Materials; 2005.

C. ASTM E 648 — Standard Test Method for Critical Radiant Flux

- of Floor Covering Systems Using a Radiant Heat Energy Source; 2006a. D. CRI 104 — Standard for Installation of Commercial Textile Floorcovering Materials; Carpet and Rug Institute; 2002. E. NFPA 253 — Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy
- Source: National Fire Protection Association: 2006. 1.03 SUBMITTALS: A. Submit three(3) 12"x12" inch strike—offs of carpeting, showing pattern and color. Samples to be submitted with sufficient time for manufacturing and delivery to meet project
- B. Submit two copies of the carpet manufacturer's printed instructions for installation of the specified carpet. C. Submit one copy of manufacturer's printed instructions for maintenance of the carpet. Descriptive literature of the accessories
- proposed for use. . In lieu of literature, three samples of each accessory may be submitted for approval. Submit four copies of shop drawings (seaming diagram) or "carpet take—off drawings(s)" for review by the Interior

A. Manufacturer Qualifications: Company specializing in

- manufacturing specified carpet with minimum three years
- 1) Mill is to supply carpeting of same dye lot for installation. If this is not possible, notify Interior Designer prior to shipment. 2) Except for approved cut pieces, the mill shall ship carpet in full rolls of 100 feet minimum only. 3. Installer Qualifications: Company specializing in installing carpet
- with minimum three years experience. 1) Carpet installer shall verify that all rolls of carpeting used in
- one space are of the same dye lot. If any rolls containing different dye lots are found, notify the Project Manager before
- 05 FIELD CONDITIONS: . Store materials in area of installation for minimum period of 24 hours prior to installation.
- . Maintain minimum 70° F ambient temperature 24 hours prior to, during and 24 hours after installation. . Ventilate installation area during installation and for 72 hours after installation
- 06 DELIVERY AND STORAGE
- A. Coordinate delivery with job progress to avoid extra handling and
- 3. All material shall be delivered in original mill wrappings with
- each roll having its mill register number properly attached. . Store under cover in a protected area. Maintain protective wrapping and store on pallets or other suitable supports minimum 4 inches above floor. 7 EXTRA MATERIALS: A. Provide a minimum of 9 square yards of carpeting of each type,
- color, and pattern specified. . Any scraps larger than one square yard and all remnants shall be given to the Project Manager for disposition. 08 WARRANTY:
- A. The carpet manufacturer shall warrant that the materials furnished are free of manufacturing defects such as: delamination, latex voids, holes in primary backing, streaks, folds in backing, plus any other defect attributed to failure to comply with the detailed specification. . The installer shall warrant that the work has been installed as specified and will adjust, restretch, align, or otherwise correct any deficiencies in installation for a period of one year from the date of substantial completion. PART 2 - PRODUCTS

2.01 CARPET: A. Manufacturer and material as specified in the schedule. 2.02 ACCESSORIES:

recommended by the carpet manufacturer.

- A. Sub-Floor Filler: Non-crumbling, non-staining type recommended by carpet manufacturer. Tackless Strip: Carpet gripper, as manufactured by Roberts Smooth Edge, Los Angeles, CA, or type recommended by carpet manufacturer to suit application, with attachment devices. Moldings and Edge Strips: Vinyl, color as selected. Adhesives: Non-staining, non-bleeding strippable type as
- . Floor Leveling material: as recommended by carpet manufacturer. Seam Adhesive: Recommended by manufacturer. G. Contact Adhesive: Compatible with carpet material; releasable PART 3 - EXECUTION
- 3.01 EXAMINATION: A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive carpet. . Verify that concrete sub-floor surfaces are ready for carpet installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by carpet manufacturer and adhesive materials manufacturer.

. Verify that required floor—mounted utilities are in correct

location. . Inspect all floor surfaces to receive carpet at least three days prior to the scheduled installation and notify the Project Manager of any deficiencies in floor surfaces or areas so that conditions may be corrected. Commencement of work will be considered as acceptance of job conditions.

A. Refer to floor plans for location of area to be carpeted and to

- schedule for types of carpeting to be installed. . Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with sub-floor . Apply, trowel, and float filler to achieve smooth, flat, hard surface. Prohibit traffic until filler is cured. Sweep and clean surfaces of all foreign material which
- would interfere with satisfactory installation of the carpeting. 3.03 INSTALLATION — GENERAL: A. Install carpet in accordance with manufacturer's instructions. 3. Verify carpet match before cutting to ensure minimal variation . Lay out carpet and locate seams in accordance with shop drawings or "Carpet Take—off Drawing" approved by the Interior
- 1) Bring any job conditions at variance with the drawings to the attention of the Project Manager. 2) Locate seams in area of least traffic, out of areas of pivoting traffic, and parallel to main traffic. Butt seams are not 3) Do not locate seams perpendicular through door openings. 4) Align run of pile in same direction as anticipated traffic and in same direction on adjacent pieces. 5) Locate change of color or pattern between rooms under
- door centerline. 6) Provide monolithic color, pattern, and texture match within any one area. 7) Seams in areas not noted on the drawing will not be . Install carpet tight and flat on subfloor, well fastened at edges, with a uniform appearance.
- installation of carpet, and be responsible for all measurements. . Carpeting that has a loop/cut loop construction is to be seamed loop to loop or loop to cut. No other seaming will be . All seams to be expertly bound together with hot melt tape seamed with a breaking strength of not less than 100 pounds.

Carpet installer shall check all dimensions for proper fit and

- All cut edges shall be trued and treated to form non-raveling joints where exposed. . Doorway seams to be centered under doors. . Where carpet meets raised surfaces, make an even surface between the two. Where carpet meets resilient flooring, use specified transition strips (see room finish schedule). . Unsatisfactory installation resulting from work performed not in accordance with the manufacturer's recommendations shall be the responsibility of the carpet installer and may result in
- removal and relaying of carpeting at the expense of the installer. 6 Head or butt seams are not permitted. 3.04 DIRECT-GLUED CARPET: A. Unroll carpeting face up to determine cuts and placement of seams, taking care that all patterns match and that pile runs in same direction. Allow for off-square walls. Roll back carpeting from area to be treated with adhesive. . Double cut carpet seams, with accurate pattern match. Make cuts straight, true, and unfrayed. Apply seam adhesive to cut
- . Apply contact adhesive to floor uniformly at rate recommended by manufacturer. After sufficient open time, press carpet into . Apply seam adhesive to the base of the edge glued down. Lay adjoining piece with seam straight, not overlapped or peaked, and free of gaps.
- . Roll with appropriate roller, 75 pounds or heavier, for complete contact of adhesive to carpet backing. Roll out all air bubbles to produce a smooth, level finish. . Trim carpet neatly at walls and around interruptions. G. Complete installation of edge strips, concealing exposed edges. Bind cut edges where not concealed by edge strips.
- A. Remove excess adhesive from floor and wall surfaces without damage. Adhesive shall be removed from carpet face immediately after installation with remover provided by manufacturer. B. Clean and vacuum carpet surfaces. B.06 SCHEDULE:

END OF SECTION

SECTION 09900 - PAINTS AND COATINGS

A. Refer to room finish schedule

edges of woven carpet immediately.

A. Surface preparation. B. Field application of paints, stains, and varnishes.

1.01 SECTION INCLUDES

PART 1 GENERAL

- C. Scope: Finish all interior and exterior surfaces exposed to view, unless fully factory—finished and unless otherwise indicated, including the following: D. Do Not Paint or Finish the Following Items: 1) Items fully factory—finished unless specifically so indicated;
- considered factory finished. 2) Items indicated to receive other finishes. 3) Items indicated to remain unfinished. 4) Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.

materials and products having factory—applied primers are not

6) Glass. 7) Concealed pipes, ducts, and conduits. 1.02 REFERENCE STANDARDS A. 40 CFR 59, Subpart D — National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S.

5) Floors, unless specifically so indicated.

Environmental Protection Agency; current edition.

B. ASTM D 4442 - Standard Test Methods for Direct Moisture

Content Measurement of Wood and Wood—Base Materials; 1992

- B. Acceptable paint and varnish manufacturers: 1) Benjamin Moore Co.) Glidden—ICI Paints. 3) Martin—Senour Co. 4) PPG Industries 5) Pratt & Lambert. Inc 6) Sherwin-Williams Co. .05 DELIVERY, STORAGE, AND HANDLING:
- inspect to verify acceptability. B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing. 1) Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in

A. Product Data: Provide four copies of data on all finishing

type of finish proposed for all surfaces to be finished.

B. Samples: Submit four paper chip samples, 8 x 8 inch in

size illustrating colors and textures proposed for each

manufacturing the products specified, with minimum 10 years

A. Manufacturer Qualifications: Company specializing in

manufacturer's product instructions. C. Primers: Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.

D. Quality Standards for Paints and Coatings:

A. Deliver products to site in sealed and labeled containers;

- a. Benjamin Moore Aura Waterborne Exterior Paint Semi Gloss Finish 632 o. Sherwin Williams Duration Exterior Latex Coating, K34 c. Porter Permanizer Exterior Acrylic Coating.
- a. Benjamin Moore Aura Matte Waterborne Interior Paint o. Porter Silken Touch Vinyl Suede Interior Latex Wall eauipment c. Deep Colors: Sherwin Williams ColorAccents Interior Latex, Y10 Series. D. Volatile Organic Compound (VOC) Content:
- 1) Provide coatings that comply with the most stringent requirements specified in the following: a. 40 CFR 59, Subpart D—National Volatile Organic Compound Emission Standards for Architectural Coatings. 2) Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added

at project site; or other method acceptable to authorities

having jurisdiction. 2.01 PAINT SYSTEMS - EXTERIOR: A. Wood, Opaque, Latex, 3 Coat:

H. Copper, Latex, 3 coat.

1.03 SUBMITTALS:

product is proposed for use.

1.04 QUALITY ASSURANCE:

experience

1) Exterior:

surface finishing product scheduled.

repair of painted and coated surfaces.

- 1) One coat of latex primer sealer. 2) Gloss: Two coats of latex enamel B. Paint WE-TR-VS - Wood, Transparent, Varnish, Stain: 1) Filler coat (for open grained wood only). One coat of stain. 3) One coat sealer.
- 4) Satin: Two coats of varnish. C. Masonry/Concrete, Opaque, Latex, 3 Coat: 1) One coat of block filler. 2) Gloss: Two coats of latex D. Gypsum Board and Plaster, Opaque, Latex, 3 Coat:

) One coat of latex primer sealer

F. Ferrous Metals, Primed, Alkyd, 2 Coat:

- 2) Gloss: Two coats of latex. E. Ferrous Metals, Unprimed, Alkyd, 3 Coat: One coat of alkyd primer 2) Gloss: Two coats of alkyd enamel.
- 1) Touch-up with rust-inhibitive primer recommended by top coat manufacturer. 2) Gloss: Two coats of alkyd enamel. G. Aluminum, Unprimed, Latex, 2 Coat: 1) Gloss: Two coats of latex enamel.
- 1) One coat wash primer for copper, brass and tin. 2) Gloss: Two coats of latex enamel. 2.02 PAINT SYSTEMS - INTERIOR: A. Wood, Opaque, Alkyd, 3 Coat 1) One coat alkyd primer sealer.

B. Paint WI-TR-VS - Wood, Transparent, Varnish, Stain:

1) Filler coat (for open grained wood only). 2) One coat of stain. 3) One coat sealer. 4) Satin: Two coats of varnish. C. Ferrous Metals, Unprimed, Alkyd, 3 Coat:

2) Semi-gloss: Two coats of alkyd enamel.

- 1) One coat of alkyd primer. 2) Semi-gloss: Two coats of alkyd enamel. D. Ferrous Metals, Primed, Alkyd, 2 Coat: RCB Bank PAINTS AND COATINGS Edmond, Oklahoma 09900 IBT/110K02
- 1) Touch-up with alkyd primer. 2) Semi-gloss: Two coats of alkyd enamel. E. Aluminum, Unprimed, Latex, 2 Coat: 1) Semi-gloss: Two coats of latex enamel.
- F. Concrete/Masonry, Latex, 3 Coat: 1) One coat of block filler. 2) Gloss: Two coats of latex. G. Gypsum Board/Plaster, Latex, 3 Coat:
- Flat: Two coats of latex. H. Gypsum Board/Plaster, Latex (at wallcovering): Latex Primer, 1 1) One coat of latex primer sealer. 2.03 ACCESSORY MATERIALS:

) One coat of latex primer sealer.

A. Accessory Materials: Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean—up materials required to achieve the finishes specified whether specifically indicated or not; commercial quality. B. Patching Material: Latex filler. C. Fastener Head Cover Material: Latex filler.

PART 3 - EXECUTION 3.01 EXAMINATION: A. Verify that surfaces are ready to receive work as instructed by the product manufacturer. B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application. Reexamine surfaces scheduled to be finished after application of first coat of primer and prior to commencement of final coat(s). Report

) Eggshell (use in wet areas only): Two coats of latex.

surface repairs or preparation after application of second coat is the responsibility of the paint contractor at no extra cost to the owners or Program Manager. C. Surfaces receiving finishes shall be dry and free from all debris, oils, dust or other deleterious materials. If, after application of paint or varnish, the finish blisters, cracks, peels, or otherwise shows indication of dampness or irregular

any conditions that may potentially affect application. Any

- condition of surface, the applied treatment shall be removed and the surface refinished at no additional cost. D. Test shop—applied primer for compatibility with subsequent cover materials. E. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content
- 1) Gypsum Wallboard: 12 percent. 2) Masonry, Concrete, and Concrete Unit Masonry: 12 percent. 3) Interior Wood: 15 percent, measured in accordance with ASTM D 4442. 4) Exterior Wood: 15 percent, measured in accordance with ASTM D 4442.

of surfaces are below the following maximums:

under the project conditions.

- 3.02 PREPARATION: A. Clean surfaces thoroughly and correct defects prior to coating B. Prepare surfaces using the methods recommended by the
- to preparing surfaces or finishing. D. Surfaces: Correct defects and clean surfaces which affect work of this section. E. Surfaces receiving finishes shall be dry and free from all debris, oils, dust, or other deleterious materials. If, after

application of paint or varnish, the finish blisters, cracks,

Remove surface appurtenances, including electrical plates,

hardware, light fixture trim, escutcheons, and fittings prior

- peels, or otherwise shows indication of dampness or irregular condition of surface, the finish shall be removed and surface refinished by this contractor at no additional cost. F. Marks: Seal with shellac or Kilz those which may bleed through surface finishes.
- G. Remove mildew from impervious surfaces by scrubbing with solution of tetra—sodium phosphate and bleach. Rinse with clean water and allow surface to dry. H. Concrete and Unit Masonry Surfaces to be Painted: Remove

dirt, loose mortar, scale, salt or alkali powder, and other

foreign matter. Fill irregularities with cement grout. Remove oil and grease with a solution of tri—sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry. Gypsum Board Surfaces to be Painted: Fill narrow shallow

- contamination by steam or high pressure water. Remove oxidation with acid etch and solvent washing. . Galvanized Surfaces to be Painted: Remove surface products. Indicate manufacturer, product name, quality, and contamination and oils and wash with solvent, Xylol or equal, to remove grease, oil, and other contaminants. Wipe dry Product data shall be submitted, whether or not the specified with clean cloth. Apply coat of etching primer. C. Maintenance Data: Submit data on cleaning, touch—up, and
 - a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime paint entire surface; spot prime after repairs.

J. Aluminum Surfaces to be Painted: Remove surface

- M. Shop-Primed Steel Surfaces to be Finish Painted: Sand and scrape to remove loose primer and rust. Feather edges to make touch—up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item. I. Interior Wood Items to Receive Opaque Finish: Wipe off dust
- and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Treat mildewed surfaces with a solution of one quart hypochlorite bleach to half cup of detergent in one gallon of water. Rinse and allow to dry thoroughly before painting. Fill nail holes, cracks, joints, and other defects after primer has dried; sand between coats. . Exterior Wood Surfaces to Receive Opaque Finish: Remove sappy sections. Fill nail holes with tinted exterior caulking
- bottom edge surfaces with clear sealer. Q. Metal Doors to be Painted: Prime metal door top and bottom
- edae surfaces. 3.03 APPLICATION - PAINT: A. Exterior Wood to Receive Opaque Finish: If final painting must be delayed more than 2 weeks after installation of woodwork,
- . Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied. D. Do not apply finishes to surfaces that are not dry. Allow
- manufacturer's recommended limits.
- H. Apply each coat to uniform appearance. l. Sand wood and metal surfaces lightly between coats to achieve
- final coat brush applied after installation. .. All exterior wood trim shall be back primed or sealed. M. Finish coats shall be smooth, free from brush marks, streaks, laps or build—up of paint, skips, or missed areas. For certain colors, more than two finish coats may be required to
- prior to final coat. O. Final coat of wall paint shall be applied after other trades
- determining number of coats applied. and sharp without overlapping. Where a portion of finish on drywall partition is damaged or
- wood. Work fillers into the grain before set. Wipe excess from surface. escutcheons, and fittings removed prior to finishing.

unacceptable, refinish entire surface of partition.

- B. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint C. Paint interior surfaces of all ductwork that are visible through registers or grilles with a flat, non-specklar black paint. D. Size and treat all walls which are to receive wall covering in preparation for the hanging of the wall covering.
- 3.05 CLEANING: A. As work proceeds, promptly remove any spilled, splashed, or splattered paint or other coating product.

B. Collect waste material that could constitute a fire hazard,

- 1) Items fully factory—finished unless specifically noted. 2) Fire rating labels, equipment serial number and capacity 3) Stainless steel items.
- B. Mechanical and Electrical: Use paint systems defined for the substrates to be finished. 1) Paint shop—primed items occurring in finished areas. 2) Paint interior surfaces of air ducts that are visible through grilles and louvers with one coat of flat black paint to visible
- 3) Paint dampers exposed behind louvers, grilles, to match face panels. C. Paint both sides and edges of plywood backboards for electrical and telephone equipment before installing equipment. 3.07 EXTERIOR PAINTING:

B. Wood cornice and trim, columns, bollards, doors and frames, wood soffits and trim, and metal island forms. 1) Color: Refer to drawings.

PART 1 - GENERAL

1.01 SECTION INCLUDES:

1) JL Industries, Inc.

SECTION 10523 - FIRE EXTINGUISHERS AND CABINETS

Fire Protection Association; 2021. B. UL(FPED) — Fire Protection Equipment Directory; Underwriters

PART 2 - PRODUCTS 2.01 MANUFACTURERS: A. Fire Extinguishers:

B. Fire Extinguisher Cabinets: 1) Larsen's Manufacturing Co. 2.02 FIRE EXTINGUISHERS:

1) Class ABC. 2) Size 10 lb. 3) Finish: Baked enamel, red color.

- B. Type: Model No. AL2409-6R, Duo, DSA Glass with clean satin anodized trim and door, aluminum rug and Futura "Fire" handle by Larsen's Mfg. Co., or approved equal. . Metal: Formed primed steel sheet; 0.036 inch thick base
- 2) Trim: Returned to wall surface, with 2 1/2 inch projection, 2 inch wide face. . Door: .0958 inch thick, reinforced for flatness and rigidity; latch. Hinge doors for 180 degree opening with two butt

paint finish. PART 3 - EXECUTION 3.01 EXAMINATION:

- A. Verify existing conditions before starting work.
- where indicated on drawings. B. Install cabinet plumb and level, with top of cabinet at 52 cracks, small holes, and minor defects with filler compound. Allow to dry and sand smooth without raising any wallboard inches above finished floor. 3.03 SCHEDULES: paper. Spot prime defects after repair. Sand between coats.

- Uncorroded Uncoated Steel and Iron Surfaces to be Painted: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by hand wire brushing or sandblasting; clean by washing with solvent. Apply
- dust, grit, and foreign matter. Seal knots, pitch streaks, and compound after prime coat has been applied. Back prime
- concealed surfaces before installation. P. Wood Doors to be Field—Finished: Seal wood door top and
- apply primer within 2 weeks and final coating within 4 weeks. . Apply products in accordance with manufacturer's instructions.
- applied coats to dry before next coat is applied. . Apply paint only when moisture content of surfaces is within
- . Apply paint materials with clean brushes, rollers, or spraying G. Primer shall be white, undercoat shall be 1/2 tint of final
- J. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat. K. All painted interior and exterior millwork and doors shall have primer and first coat spray applied prior to installation and
- achieve an acceptable quality. Need for additional coats shall be determined by the Project Manager. N. Patch wall after primer and after first coat of paint and just work has been completed except for the installation of resilient

P. Do not apply additional coats until completed coat has been

inspected by the Project Manager. Only completed coats of paint that have been inspected shall be considered in Q. Finish tops and bottoms of all doors in same manner as door R. Make edges of paint adjoining other materials or colors clean

Wood to Receive Transparent Finishes: Tint fillers to match

- U. Reinstall electrical cover plates, hardware, light fixture trim, 3.04 FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT: A. Paint shop—primed equipment, where indicated.
- . Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings which were removed prior to
- place in closed metal containers, and remove daily from site. 3.06 SCHEDULE - SURFACES TO BE FINISHED: A. Do Not Paint or Finish the Following Items:
- A. Exposed piping, metal flashing or trim without a factory finish: 1) Finish to match adjacent building material colors.

3.08 SCHEDULE - INTERIOR PAINT:

A. Refer to room finish schedule. END OF SECTION

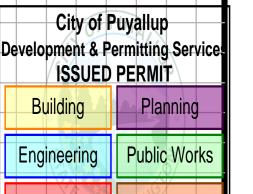
A. Fire extinguishers. B. Fire extinguisher cabinets. 1.02 REFERENCES: A. NFPA 10 - Standard for Portable Fire Extinguishers; National

Laboratories Inc.; current edition. 1.03 SUBMITTALS: A. Product Data: Provide extinguisher operational features and cabinet physical dimensions

2) Larsen's Manufacturing Co.

A. Dry Chemical Type: Cast steel tank, with pressure gage. 2.03 FIRE EXTINGUISHER CABINETS:

- D. Cabinet Configuration: Semi-recessed type. 1) Sized to accommodate accessories.
- hinges. Provide nylon catch. Door Glazing: Glass, clear, 1/8 inch thick float. Set in resilient channel gasket glazing.
- G. Finish of Cabinet Exterior Trim and Door: Primed for field H. Finish of Cabinet Interior: White enamel.
- B. Verify rough openings for cabinet are correctly sized and 3.02 INSTALLATION: A. Install in accordance with manufacturer's instructions and



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3.03 SCHEDULES: A. Locations: Refer to drawings and as directed by the local Fire Marshal. SECTION 10800 - TOILET ACCESSORIES PART 1 — GENERAL 1.01 SECTION INCLUDES: closet(s). B. Grab bárs. 1.02 REFERENCES: 1.03 SUBMITTALS: A. Product Data: Provide four copies of data on accessories describing size, finish, details of function, attachment 1.04 DELIVERY, STORAGE, AND HANDLING: identification. PART 2 - PRODUCTS 2.01 MANUFACTURERS: 2.02 MATERIALS: installation. B. Stainless Steel Sheet: ASTM A 167, Type 304. C. Stainless Steel Tubing: ASTM A 269. 2.03 FINISHES:

END OF SECTION

A. Accessories for toilet rooms and utility rooms and janitor's

A. ASTM A 123/A 123M — Standard Specification for Zinc (Hot—Dip Galvanized) Coatings on Iron and Steel Products;

B. ASTM A 269 — Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service;

B. Manufacturer's Installation Instructions: Provide two copies. Indicate special procedures and conditions requiring special

A. Deliver in protective cartons, with item and manufacturer's

B. Store under security in a dry location.

A. Products listed are made by Bobrick Washroom Equipment, Inc. A. Accessories — General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for

D. Adhesive: Two component epoxy type, waterproof.
E. Fasteners, Screws, and Bolts: Hot dip galvanized, tamper—proof.

A. Stainless Steel: No. 4 satin brushed finish for accessories.

Brushed finish for grab bars. B. Galvanizing for Items other than Sheet: ASTM A 123/A 123M to 1.3 oz/sq yd. Galvanize ferrous metal and fastening

C. Shop Primed Ferrous Metals: Pretreat and clean, apply one

coat primer and bake.

2.04 TOILET ROOM ACCESSORIES: A. Refer to drawings.

2.05 UTILITY ROOM ACCESSORIES: A. Mop and Broom Holder: 0.05 inch thick stainless steel, Type 304, hat-shaped channel.

1) Holders: 3 spring—loaded rubber cam holders. 2) Length: Manufacturer's standard length for number of

hólders. **PART 3 – EXECUTION**

installation.

A. Refer to drawings.

3.01 EXAMINATION: A. Verify existing conditions before starting work.

B. Verify exact location of accessories for installation. 3.02 PREPARATION: A. Deliver inserts and rough—in frames to site for timely

B. Provide templates and rough—in measurements as required. 3.03 INSTALLATION: A. Install accessories in accordance with manufacturers'

instructions. B. Install plumb and level, securely and rigidly anchored to substrate.

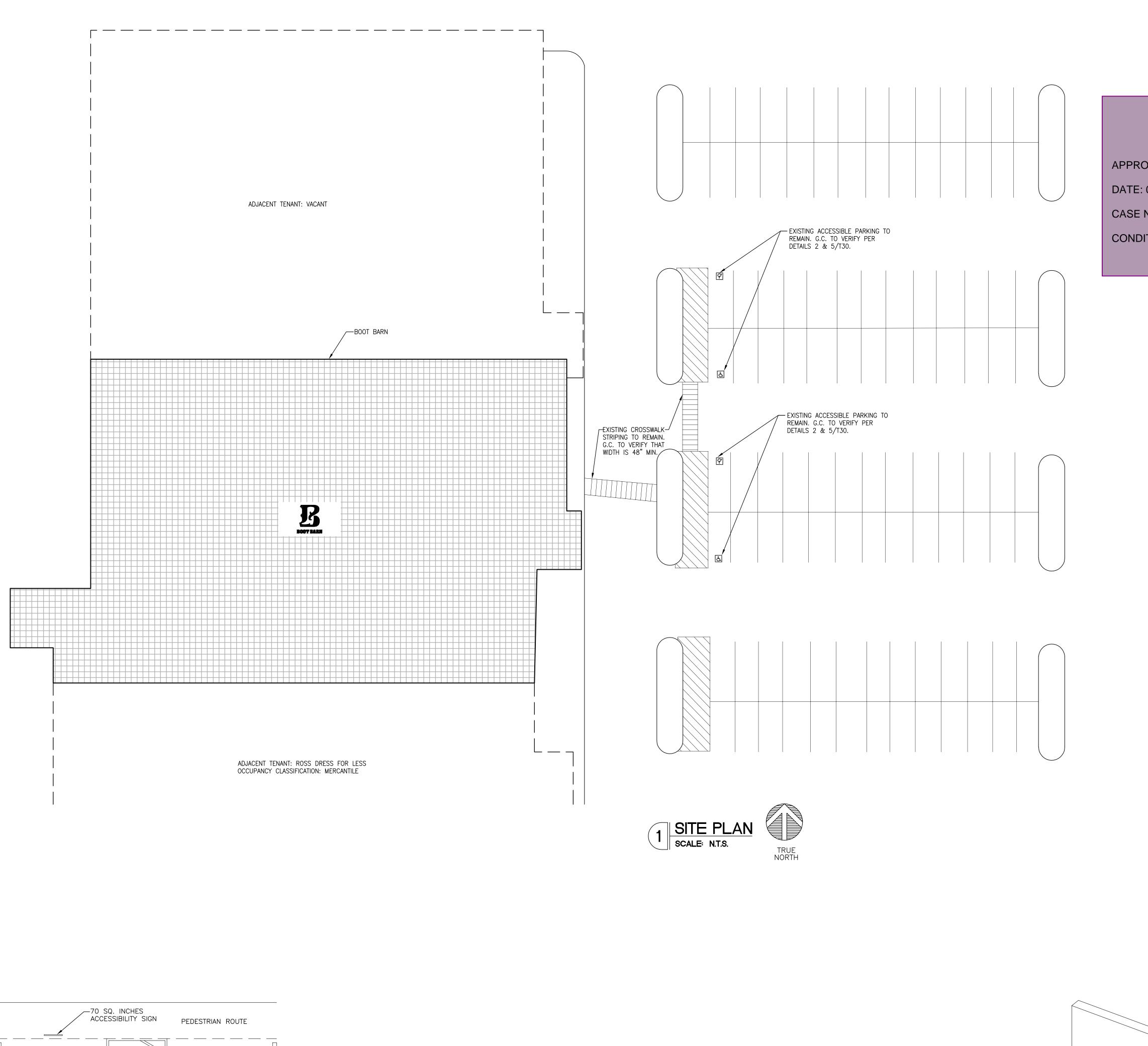
C. Mounting Heights and Locations: As required by accessibility regulations and as indicated on drawings.

3.04 SCHEDULE:

END OF SECTION

STATE OF WASH 4/18/24 GOGLIA City of Puyallup Development & Permitting Services Building Engineering Traffic Fire

SOUTH HILL CENTER



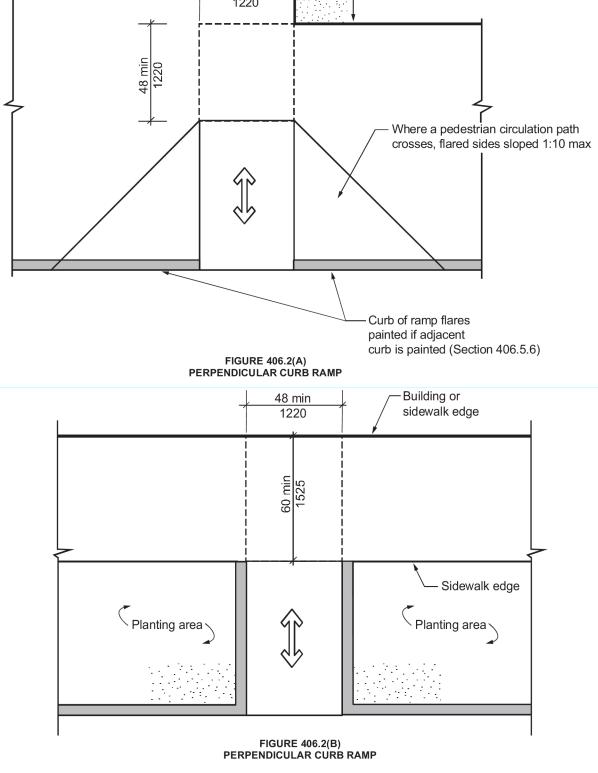
APPROVED PLAN CITY OF PUYALLUP PLANNING DIVISION

APPROVED BY: ARamirez

DATE: 04/30/2024

CASE NO.: PRCTI20240669

CONDITIONS: Please see Planning condition in CityView



sidewalk edge

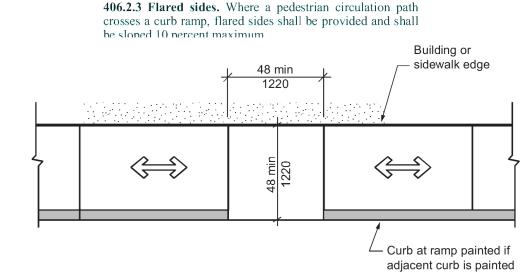
406.2 Perpendicular curb ramps. Perpendicular curb ramps shall comply with Sections 406.2 and 406.5.

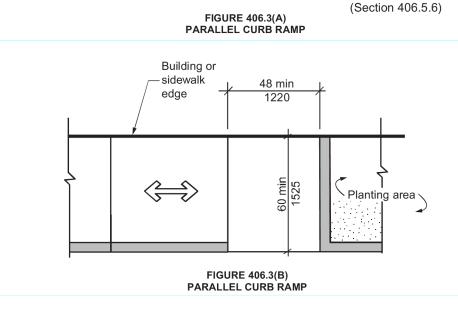
406.2.1 Landings. A landing 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the top of a curb ramp. The landing shall be permitted to overlap pedestrian routes and clear spaces. Where the landing is constrained at the back-of-sidewalk, the landing shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) mini-

the direction of the curb ramp run. The slope of landings shall be 1:48 maximum in all directions. **406.2.2 Running slope.** The running slope of a curb ramp shall cut through or shall be built up to the curb at right angles

or shall meet the gutter grade break at right angles where the curb is curved. The running slope of a curb ramp shall be 1:20 minimum and 1:12 maximum. The curb ramp run length shall not be required to exceed 15 feet (4570 mm).

mum. The 60-inch (1525 mm) dimension shall be provided in

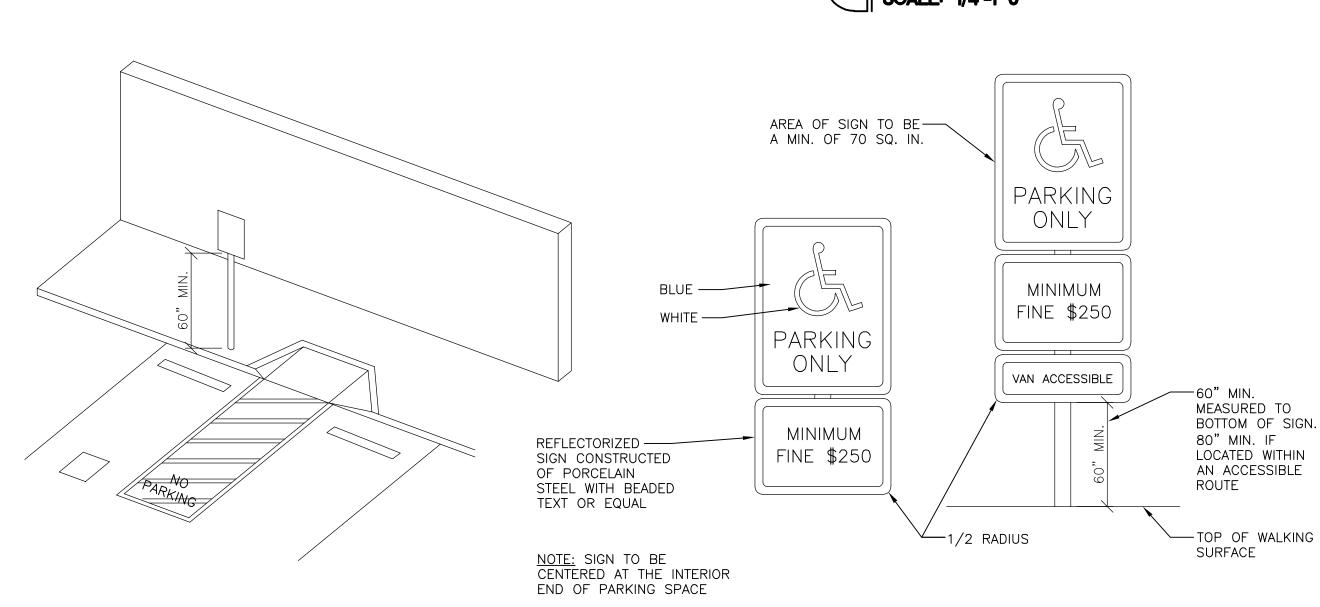




406.3 Parallel curb ramps. Parallel curb ramps shall comply with Sections 406.3 and 406.5. 406.3.1 Landing. A landing 48 inches (1220 mm) minimum by 48 inches (1220 mm) minimum shall be provided at the bottom of a curb ramp. The landing shall be permitted to overlap pedestrian routes and clear spaces. Where the landing is constrained on two or more sides, the landing shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum. The 60 inches (1525 mm) dimension shall be provided in the direction of the pedestrian street crossing. The slope of landings shall be 1:48 maximum in all directions. **406.3.2 Running slope.** The running slope of a curb ramp shall be in line with the direction of sidewalk travel. The run-

maximum. The curb ramp run length shall not be required to exceed 15 feet (4570 mm). 6 CURB RAMP DETAIL
SCALE: 1/4"-1"-0"

ning slope of a curb ramp shall be 1:20 minimum and 1:12





17" MIN.

(24" RECOMMENDED)

UNAUTHORIZED VEHICLES
PARKED IN DESIGNATED
ACCESSIBLE SPACES NOT
DISPLAYING DISTINGUISHING
PLACARDS OR SPECIAL
LICENSE PLATES ISSUED FOR
PERSONS WITH DISABILITIES
WILL BE TOWED AWAY AT THE
OWNER'S EXPENSE.

TOWED VEHICLES
MAY BE RECLAIMED AT
(INSERT ADDRESS)
OR BY TELEPHONING

-LETTERING ON SIGN

MUST BE A MINIMUM

INFORMATION MUST BE INCLUDED ON SIGN

(MINIMUM OF 1" IN

OF 1" IN HEIGHT

— APPROPRIATE

HEIGHT)

WHEEL STOP

TYP. ———

PAVEMENT

SYMBOL

96" MIN. AT TYPICAL ACCESSIBLE -PARKING STALL

132" MIN. AT VAN ACCESSIBLE

PARKING STALL

-STRIPES AT 36" ON CENTER

-WITHIN THE LOADING

HIGH LETTERS MIN.

PARKING

2 ADA PARKING DIAGRAM

SCALE: 1/4'=1'-0'

AND UNLOADING ACCESS

AISLE PAINT THE WORDS
"NO PARKING" IN 12"

60" MIN. AT TYPICAL ACCESSIBLE

PARKING STALL

PARKING STALL



50%-65%

BASE DIAMETER

1.6 - 2.4

41 - 61

6.4 0 0 0 0 0 1 1 1 1

0 0 0 0

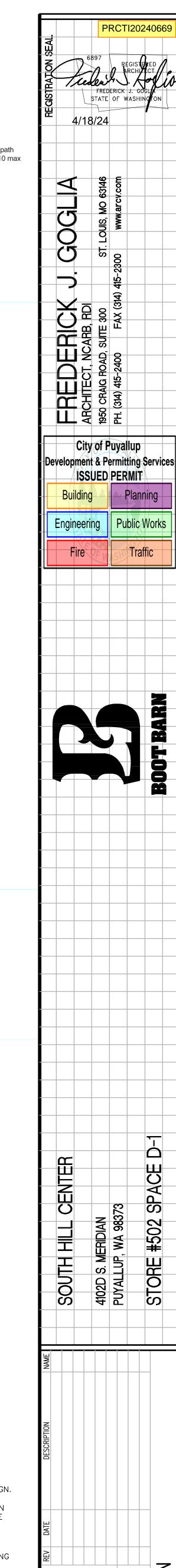
0.9-1.4

23-36

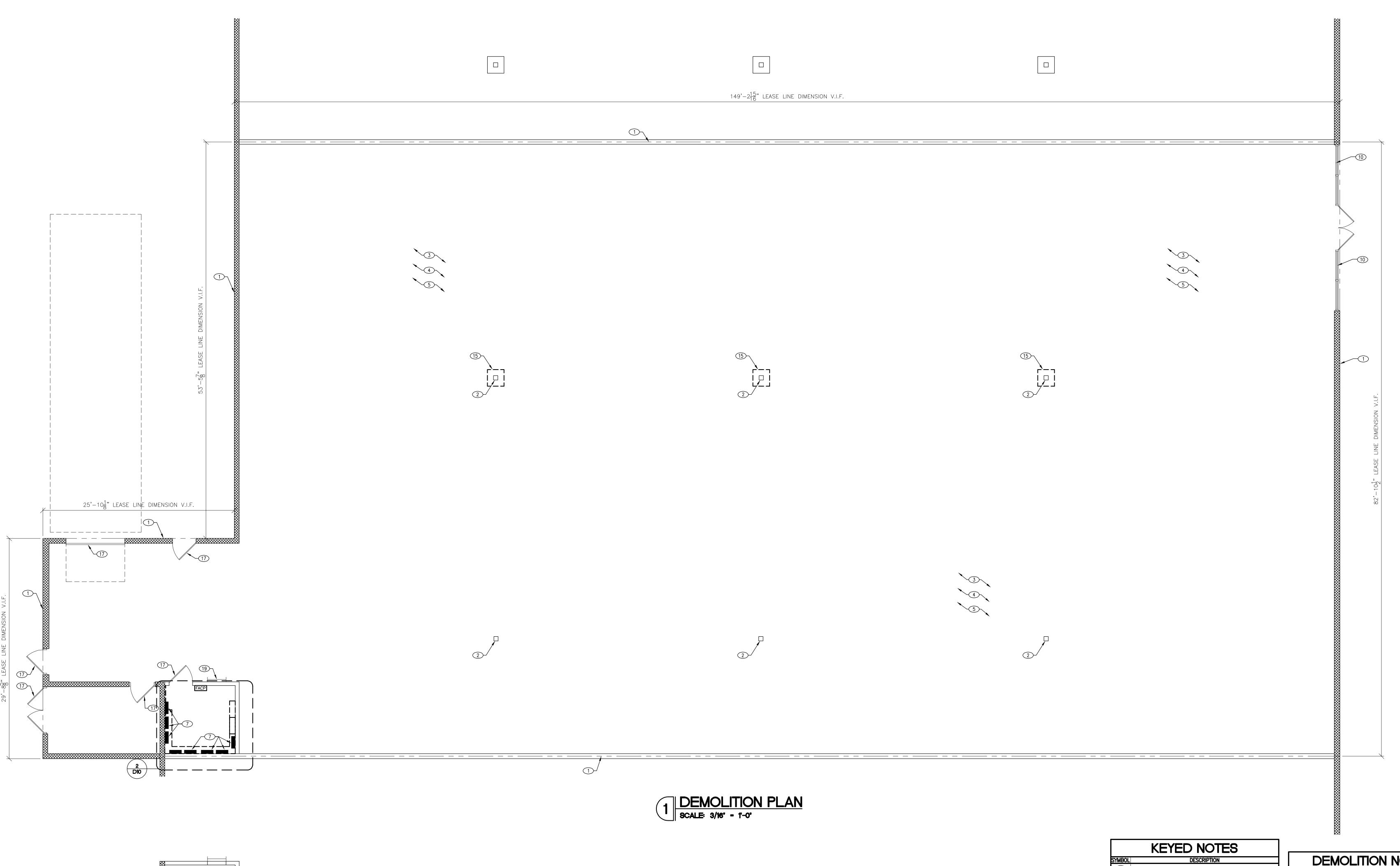
DETAILS ARE FOR REFERENCE ONLY
G.C. TO VERIFY EXISTING SITE CONDITIONS PER DETAILS AND REPORT BACK TO ARCHITECT AND TENANT P.M. OF FINDINGS.

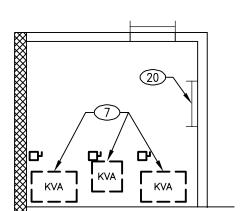
ANY SITE MODIFICATIONS WILL NEED TO BE COORDINATED WITH LANDLORD AND UNDER A SEPARATE PERMIT.





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2 DEMOLITION PLAN
SCALE: 3/16' - 1'-0'

GENERAL NOTES

- G.C. TO VERIFY ALL DIMENSIONS WITHIN (1) WEEK OF START OF PROJECT AND/OR BEFORE ANY NEW CONSTRUCTION BEGINS. ANY DISCREPANCIES TO BE RESOLVED WITH BOOT BARN PROJECT MANAGER PRIOR TO
- START OF FRAMING OR ROUGH-IN. G.C. TO INSTALL TENANT PROVIDED GRAPHICS 48 HOURS
- OF GRAPHICS. CONTRACTOR TO VERIFY, PRIOR TO BIDDING, COMPLETE

AFTER START DATE, BARRICADE CONSTRUCTION OR RECEIPT

SCOPE OF DEMOLITION. ALL REQUIRED DEMOLITION TO BE INCLUDED IN THE BASE BID. DEMOLITION PLAN IS ONLY AN ESTIMATE OF SCOPE OF WORK.

G.C. TO VERIFY ALL BARRICADE REQUIREMENTS WITH MALL

MANAGER PRIOR TO BID.

1 LEASE LINE, TYP.

- RECEIVE NEW FLOORING. SEE FINISH PLAN.

 REMOVE EXISTING CEILING AND LIGHTING, INCLUDING ALL HANGER WIRE, ETC.

 EXISTING ELECTRICAL EQUIPMENT TO REMAIN.
- 7 REMOVE EXISTING ELECTRICAL EQUIPMENT. B) EXISTING PLUMBING FIXTURES AND ACCESSORIES TO REMAIN.
- 9 REMOVE EXISTING PLUMBING FIXTURES AND ACCESSORIES. EXISTING STOREFRONT FRAMING, GLAZING, AND DOORS TO REMAIN.
- 11 EXISTING DOOR AND FRAME TO BE REMOVED
- 12 EXISTING DEMISING WALL TO REMAIN.
- (13) EXISTING INTERIOR WALL TO BE REMOVED, TYP. 14 EXISTING FURRING TO REMAIN.

20 EXISTING ACCESS LADDER TO ROOF.

- REMOVE EXISTING FURRING. (16) REMOVE EXISTING STOREPRONT CONSTRUCTION
- 17 EXISTING DOOR AND FRAME TO REMAIN, TYP.

(18) REMOVE EXISTING STAIRS: (19) EXISTING ACCESS LADDER TO MEZZANINE.

DEMOLITION NOTES

- EXISTING DEMISING WALLS REMOVE ALL EXISTING FIXTURES ON WALLS REPAIR, REPLACE OR INSTALL NEW 5/8" TYPE "X" GYPSUM BOARD. REMOVE EXISTING CEILING AND GRID. REMOVE ALL FLOORING AND SUBFLOOR DOWN TO SLAB. REMOVE GLUE
- . CONTRACTOR TO VERIFY CONDITION OF ANY EXISTING DOORS TO REMAIN. VERIFY CONDITION OF HARDWARE. REPLACE IF NECESSARY. PROVIDE HARDWARE AS SPECIFIED

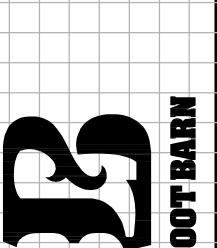
AND THINSET COMPOUNDS.

- ON DRAWINGS. . SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR FURTHER DEMOLITION WORK.
- G.C. TO VERIFY AND REMOVE ADDITIONAL ITEMS PER PLANS AS REQUIRED.

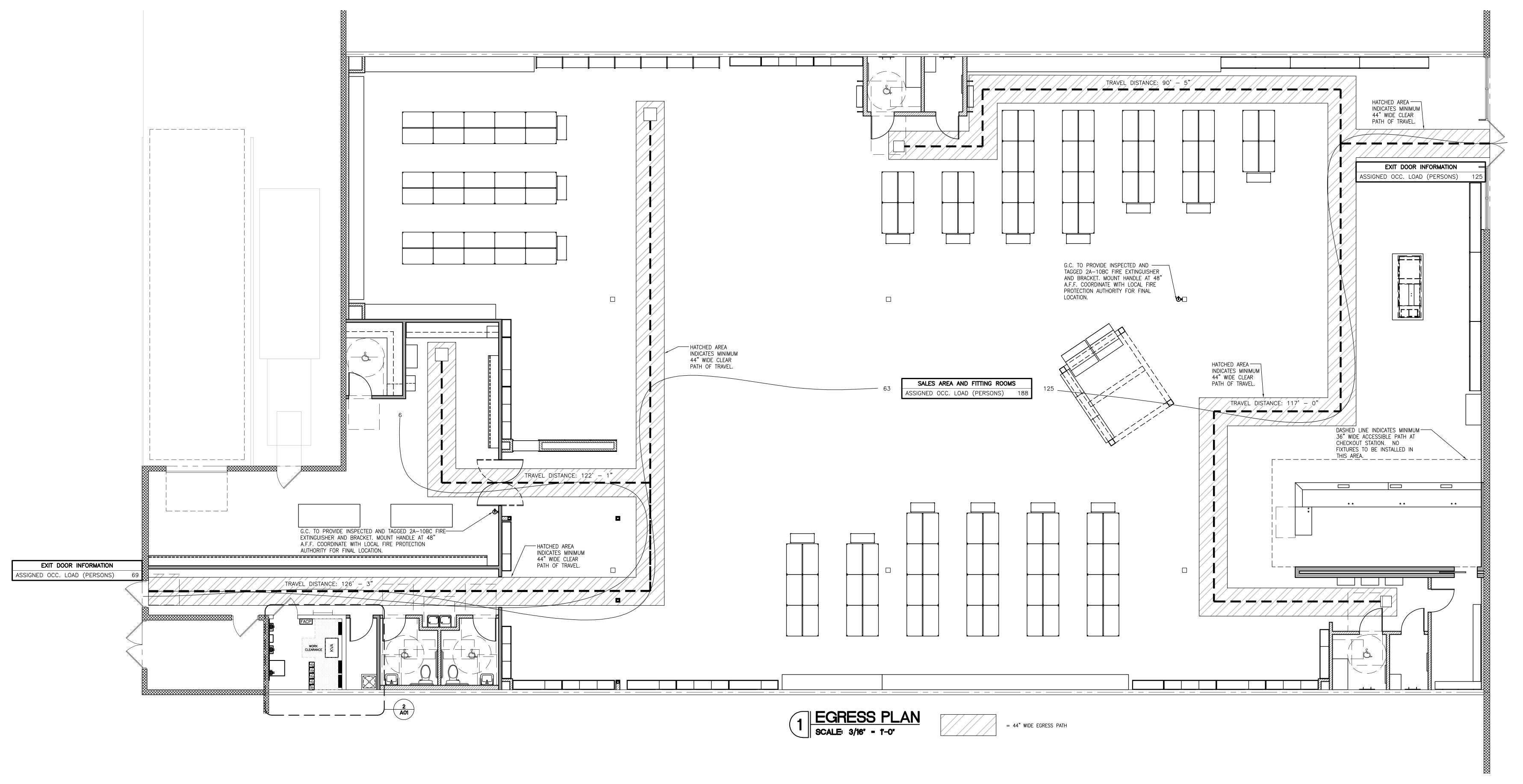
AND DEBRIS PRIOR TO NEW CONSTRUCTION.

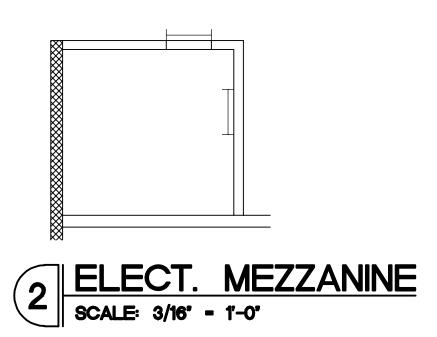
- GENERAL CONTRACTOR TO MAINTAIN THE INTEGRITY OF ALL FIRE-RATED CONSTRUCTION. REMOVE ALL DEMOLITION MATERIALS INCLUDING RUBBISH
- . G.C. TO REMOVE ALL FLOORING & SUB-FLOORING MATERIAL DOWN TO THE SLAB. G.C. TO BEAD BLAST EXISTING SLAB. ANY WALLS THAT REMAIN - G.C. SHALL INSPECT CONDITION AND REPAIR AS NEEDED TO BRING BACK TO "LIKE NEW" CONDITION.

	ARC	1950 (PH. (3			
evelo	pmei	nt & I	Perm	allup itting RMI	Serv	/ic
В	uildin	g		Plar	ning	
Eng	inee	ring	Р	ublic	Wor	ks



D10







- EXIT SIGNS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED.
- EXIT SIGNS ILLUMINATED BY AN EXTERNAL SOURCE SHALL HAVE AN INTENSITY OF NOT LESS THAN 5 FOOT-CANDLES (54 LUX).
- . INTERNALLY ILLUMINATED SIGNS SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SECTION 2702.
- EXIT SIGNS SHALL BE ILLUMINATED AT ALL TIMES.
- EXIT SIGNS SHALL BE CONNECTED TO AN EMERGENCY POWER SYSTEM THAT WILL PROVIDE ILLUMINATION OF NOT LESS THAN 90 MINUTES IN CASE OF PRIMARY POWER LOSS (1011.2 -
- 6. EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. SEE 1008.1.8.3 FOR EXCEPTIONS.
- . DOOR HANDLES, LOCK AND OTHER OPERATING DEVICES SHALL BE INSTALLED AT A MIN. 34" AND A MAX. 44" ABOVE THE FINISHED FLOOR.
- 8. ALL EGRESS DOOR OPERATION SHALL ALSO COMPLY WITH SECTION 1008.1.8 1008.1.8.6.
- 9. THE MEANS OF EGRESS, INCLUDING THE EXIT DISCHARGE, SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING SPACE SERVED BY THE MEANS OF EGRESS IS OCCUPIED.
- 10. THE MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT-CANDLE AT THE WALKING SURFACE.

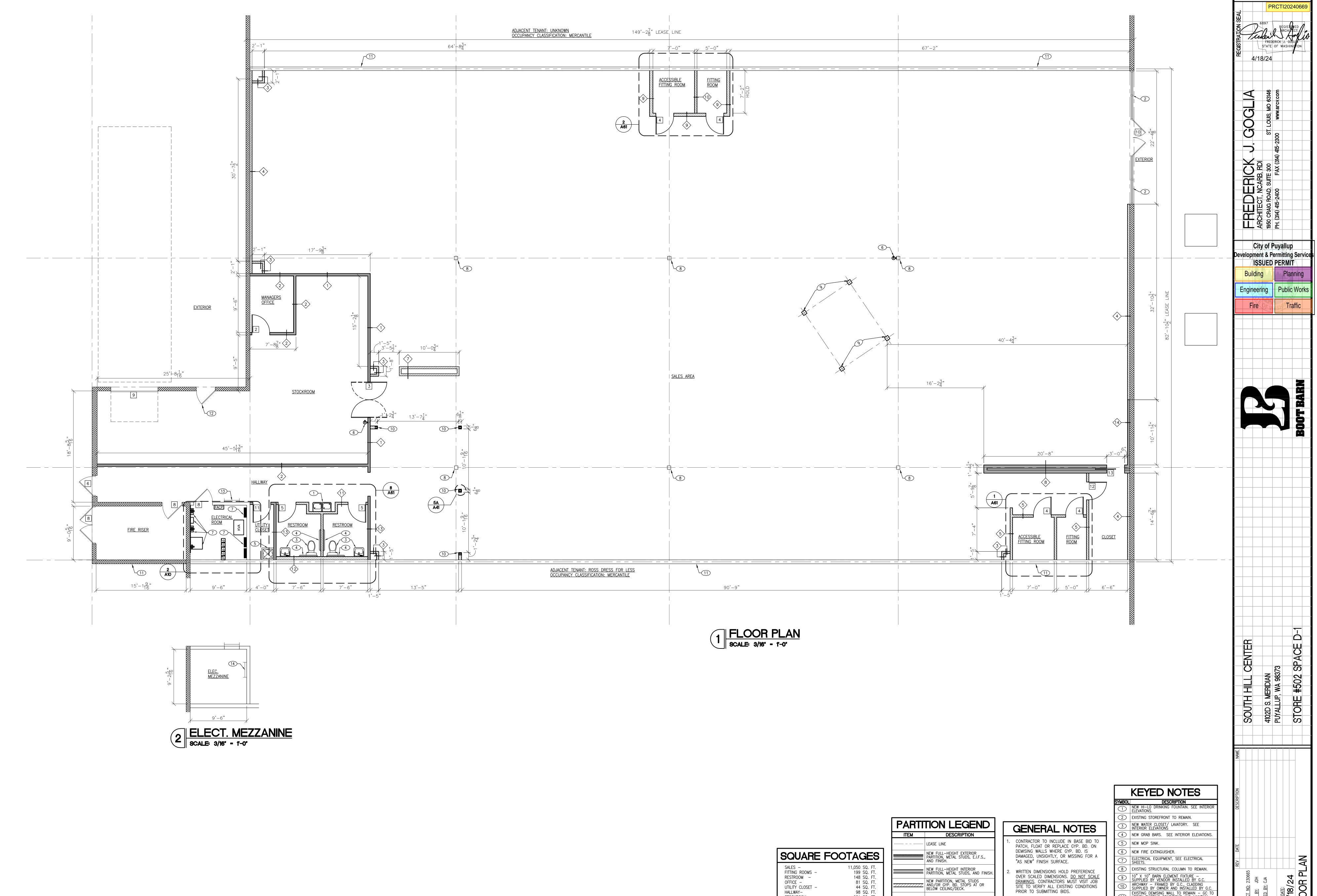
GENERATOR. THE INSTALLATION OF THE EMERGENCY POWER SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 2702.

- 1. THE POWER SUPPLY FOR MEANS OF EGRESS ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES' ELECTRICAL SUPPLY. IN THE EVENT OF POWER SUPPLY FAILURE, AN EMERGENCY ELECTRICAL SYSTEM SHALL AUTOMATICALLY ILLUMINATE THE FOLLOWING AREAS: a. AISLES AND UNENCLOSED EGRESS STAIRWAYS IN ROOMS AND SPACES THAT REQUIRE TWO OR MORE MEANS OF EGRESS. b. CORRIDORS, EXIT ENCLOSURES AND EXIT PASSAGEWAYS IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
- c. EXTERIOR EGRESS COMPONENTS AT OTHER THAN THE LEVEL OF EXIT DISCHARGE UNTIL EXIT DISCHARGE IS ACCOMPLISHED FOR BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS. d. INTERIOR EXIT DISCHARGE ELEMENTS, AS PERMITTED IN SECTION 1024.1, IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS. e. EXTERIOR LANDINGS, AS REQUIRED BY SECTION 1008.1.5, FOR EXIT DISCHARGE DOORWAYS IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
- 2. THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF STORAGE BATTERIES, UNIT EQUIPMENT OR AN ON-SITE
- EMERGENCY LIGHTING FACILITIES SHALL BE ARRANGED TO PROVIDE INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOT-CANDLE (11 LUX) AND A MINIMUM AT ANY POINT OF 0.1 FOOT-CANDLE (1 LUX) MEASURED ALONG THE PATH OF EGRESS AT FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO 0.6 FOOT-CANDLE (6 LUX) AVERAGE AND A MINIMUM AT ANY POINT OF 0.06 FOOT—CANDLE (0.6 LUX) AT THE END OF THE EMERGENCY LIGHTING TIME DURATION. A MAXIMUM—TO—MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40 TO 1 SHALL NOT BE EXCEEDED.

REGISTRATION SEAL	/	red	B97 FRED STATE	Q ,	REG AR CK	202 GISTER CHIZ J. GO		Tio
REG		4/18	3/24					
	GOG 12		ST. LOUIS, MO 63146					
	RICK J	ICARB, RDI	ROAD, SUITE 300	EAX (314) 415-2300				
	FPFDF	ARCHITECT, NC/	RAIG ROA	PH (344) 415-2400				
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REV	PROJECT NO: 230665	DRAWN BY: JDH	CHECKED BY: CJA		JUE DATE:	04/18/24	12/01/t	FCHEUV PLAN
	<u> </u>					1	<u>ا ر</u>	<u></u>

THE EXIT PATH SHALL BE IDENTIFIED BY EXIT SIGNS CONFORMING TO THE REQUIREMENTS OF SECTION 1011. EXIT SIGNS SHALL BE READILY VISIBLE FROM ANY DIRECTION OF APPROACH. EXIT SIGNS SHALL BE LOCATED AS NECESSARY TO CLEARLY INDICATE THE DIRECTION OF EGRESS TRAVEL. NO POINT SHALL BE MORE THAN 100 FEET FROM THE NEAREST VISIBLE

SIGN. (1011)



98 SQ. FT.

921 SQ. FT.

162 SQ. FT. 99 SQ. FT. 13,133 SQ. FT.

105 SQ. FT.

EXISTING CONCRETE MASONRY WALL

PARTITION TYPE. SEE SHEET A70.

DOOR TYPE. SEE SHEET T10.

STOCKROOM -

FIRE RISER — ELECTRICAL ROOM — TOTAL —

ELEC. MEZZANINIE -

G.C. TO VERIFY ALL DIMENSIONS WITHIN (1 WEEK OF START OF PROJECT. ANY DISCREPANCIES TO BE RESOLVED WITH BOOT BARN PROJECT MANAGER PRIOR TO START OF FRAMING OR ROUGH-IN.

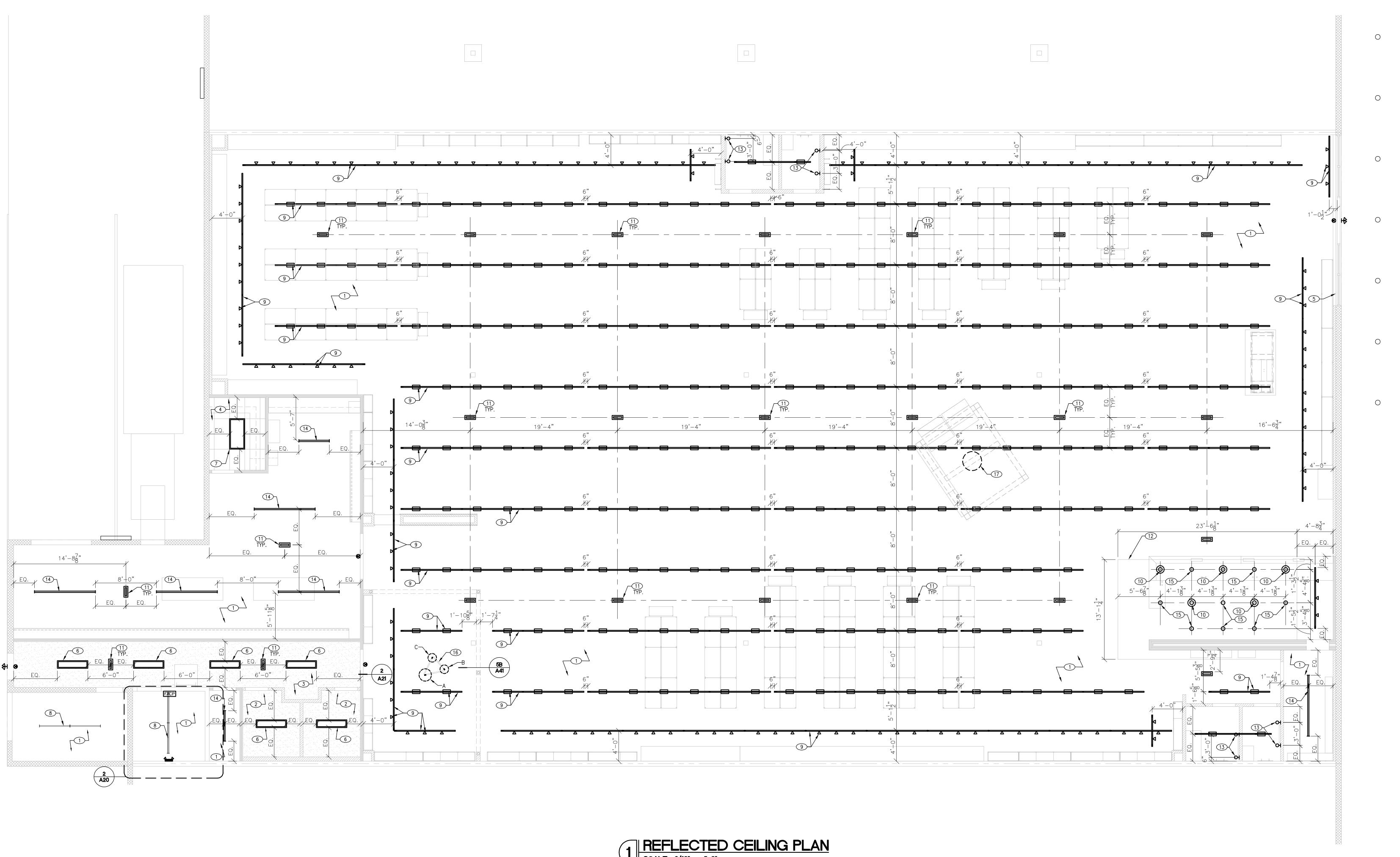
14 ACCESS LADDER TO ROOF.

9 10" X 10" BARN ELEMENT FIXTURE —
SUPPLIED BY VENDOR INSTALLED BY G.C.

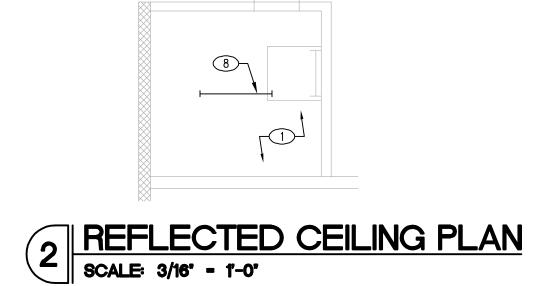
10 ARCHWAY — FRAMED BY G.C., CLADDING
SUPPLIED BY OWNER AND INSTALLED BY G.C.

EXISTING DEMISING WALL TO REMAIN — GC TO
VERIFY EXISTING CONDITIONS AND MAINTAIN
ANY FIRE RATINGS 12 EXISTING TRASH COMPACTOR DOOR. (13) ACCESS LADDER TO MEZZANINE.

A10



1 REFLECTED CEILING PLAN
SCALE: 3/16" - 1'-0"



REFLECTED CEILING PLAN NOTE

THE REFLECTED CEILING PLAN SHALL GOVERN ALL CEILING PENETRATION LOCATIONS. MECHANICAL DUCTWORK AND ALL ELECTRICAL CONDUITS SHALL BE RUN TO AVOID CONFLICT WITH THE REFLECTED CEILING PLAN. G.C. SHALL NOTIFY TENANT UPON START OF PROJECT IF EXISTING DUCTWORK, CONDUIT, OR OTHER EXISTING SYSTEMS WILL CONFLICT WITH THE PROPOSED REFLECTED CEILING PLAN. NO MODIFICATIONS TO THE REFLECTED CEILING PLAN WILL BE ACCEPTED DUE TO INSTALLATION OF CONTRACTOR—PROVIDED SYSTEMS OR EQUIPMENT.

OPEN TO DECK CEILING NOTES

- . ANY EXISTING DUCTWORK IS TO BE RESECURED AS REQUIRED, AND IS TO BE CLEANED THOROUGHLY. ANY EXTERIOR INSULATION IS TO BE REMOVED.
- . G.C. TO REMOVE ALL ABANDONED OR UNUSED DUCTWORK, PIPING, CONDUIT, INSULATION, ETC. FROM THE SALES AREA, FITTING ROOMS, AND STOCKROOM.
- ALL NEW MANNER F ANGLES.
- UNDERSID
- 4. G.C. TO RESECURE ALL EXISTING EQUIPMENT.

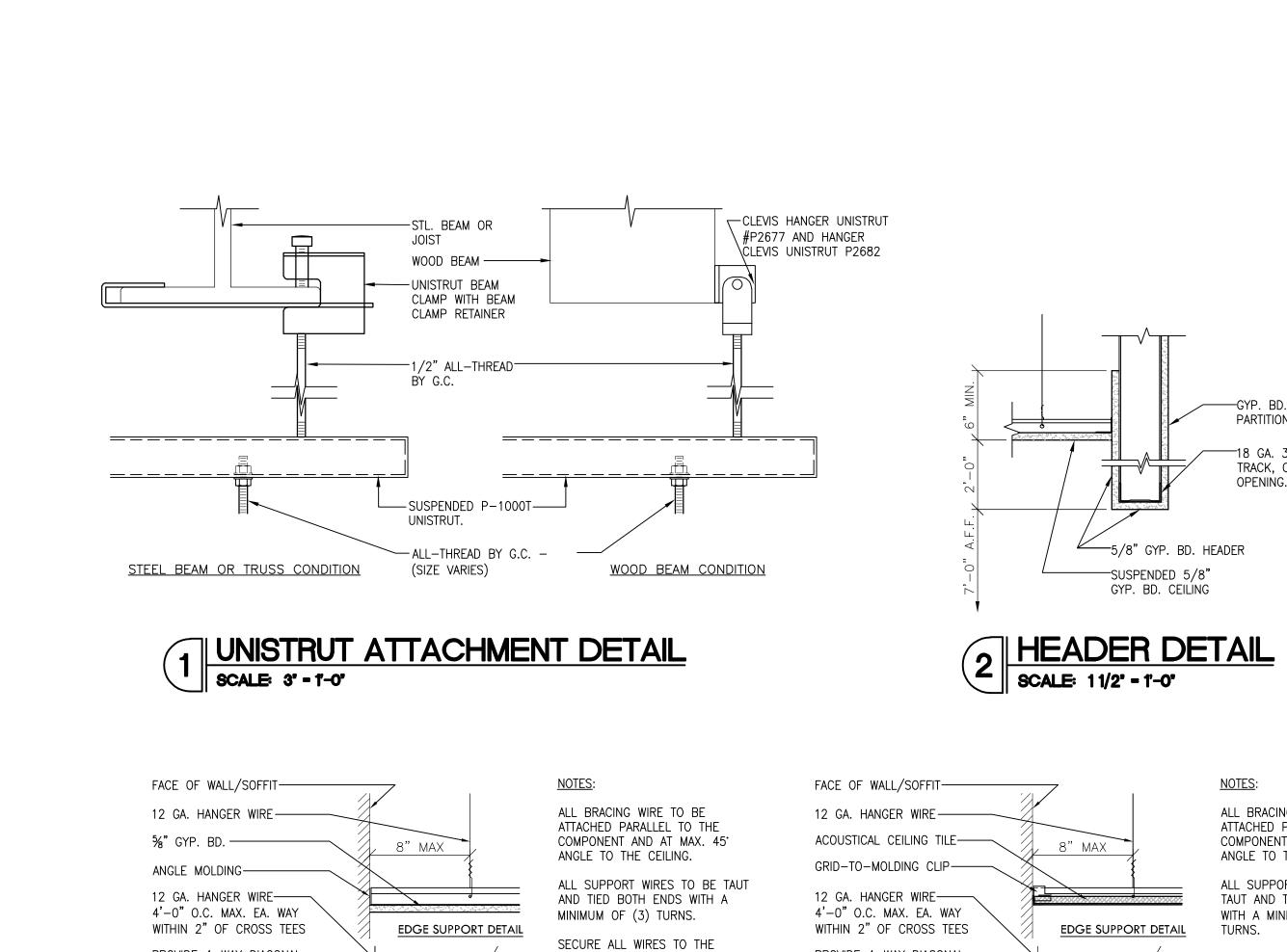
EXISTING STRUCTURE TO BE CLEANED THOROUGHLY. PAINT

. ALL CONDUIT, DUCTWORK, JOISTS, ETC. TO BE PAINTED

CONDUIT, ETC. TO BE PLACED IN AN ORGANIZED	
RUNNING IN STRAIGHT LINES OR 90 DEGREE	
HOLD CONDUIT AS TIGHT AS POSSIBLE TO	
DE OF EXISTING JOISTS.	
DE OF EXISTING JOISTS.	

8 EXISTING CHAIN-HUNG LIGHT FIXTURE @ 13'-0" A.F.F.

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	GENERAL NOTE		SOUTH		4102D	PU.	
	.C. TO SUPPLY AND INSTALL CONDUIT FOR LOW VOLTAGE						
	IRING AS REQUIRED. COORDINATE WITH BOOT BARN ROJECT MANAGER.			=		=	
		NAME		_		_	
CYALDOL	KEYED NOTES						
SYMBOL 1	NO CEILING. OPEN TO DECK ABOVE. PAINT P-1.						
2	GYP. BD. CEILING AT 8'-0" A.F.F. PAINT P-3. SEE DETAIL 4/A21. GYP. BD. CEILING AT 9'-0" A.F.F. PAINT P-3. SEE DETAIL	PTION					
3 4	4/A21. ACOUSTICAL TILE CEILING (ACT1) AT 9'-0" A.F.F. SEE DETAIL	DESCRIPTION					
5	5/A21. EXISTING STOREFRONT SOFFIT						
6	1X4 RECESSED LIGHT FIXTURE, CENTERED IN CEILING.						
7	2X4 LAY-IN LIGHT FIXTURE.		+	_			_
8 9	EXISTING CHAIN—HUNG LIGHT FIXTURE @ 13'-0" A.F.F. TRACK LIGHT FIXTURES. MOUNT TRACK AT 13'-0" A.F.F. SEE DETAIL 3/A21.	DATE					
10	PENDANT LIGHT FIXTURE OVER CASHWRAP. B.O. PENDANT @ 7'-7".	REV		+		+	_
(1)	NEW EMERGENCY LIGHTING AT 13'-0" AFF - OR - SURFACE MOUNTED TO UNDERSIDE OF CEILING - SEE ELECTRICAL FOR MORE INFORMATION.	<u> </u>	992			-	
12	CASHWRAP SOFFIT AT 11'-0" AFF - SEE SHEET A43.		230665		<u>r:</u> CJA		,
(13)	WALL-MOUNTED LIGHT FIXTURE. SEE INTERIOR ELEVATIONS AND ELECTRICAL DRAWINGS.		PROJECT NO:	N BY:	KED BY:	DATE:	
<u>14</u> <u>15</u>	RELOCATED CHAIN—HUNG LIGHT FIXTURE @ 13'-0" A.F.F. NEW RECESS CAN LIGHT.		PROJ[DRAWN BY:	CHECKED		
(16)	NEW PENDANT LIGHTING FIXTURE AT ARCHWAY FIXTURE — SEE DETAIL 6/A21	F					= ~
17)	NEW PENDANT LIGHT IN BARN ELEMENT				12	2(J



STRUCTURE ABOVE.

DUCTS.

INDICATION.

COMPRESSION STRUT ATTACHMENT TO STRUCTURE.

SYSTEM SUPPORT DETAIL TOTAL SYSTEM WEIGHT NOT TO EXCEED 4 PSF

4 GYP. BD. CEILING DETAIL SCALE: 11/2' - 1'-0'

WHERE WIRE MUST BEAR
AGAINST PIPES AND DUCTS,
APPLY DUCT TAPE FRICTION
PROTECTION TO PIPES AND

SEISMICALLY BRACE LIGHT
FIXTURES, DIFFUSERS, ETC. IN
ACCORDANCE WITH LOCAL CODE
IN SEISMIC ZONES. SEE COVER
SHEET FOR SEISMIC ZONE

SEE TYPICAL FRAMING DETAILS IN THIS DWG. SET FOR

PROVIDE 4-WAY DIAGONAL-

12 GA. BRACING WIRES IN

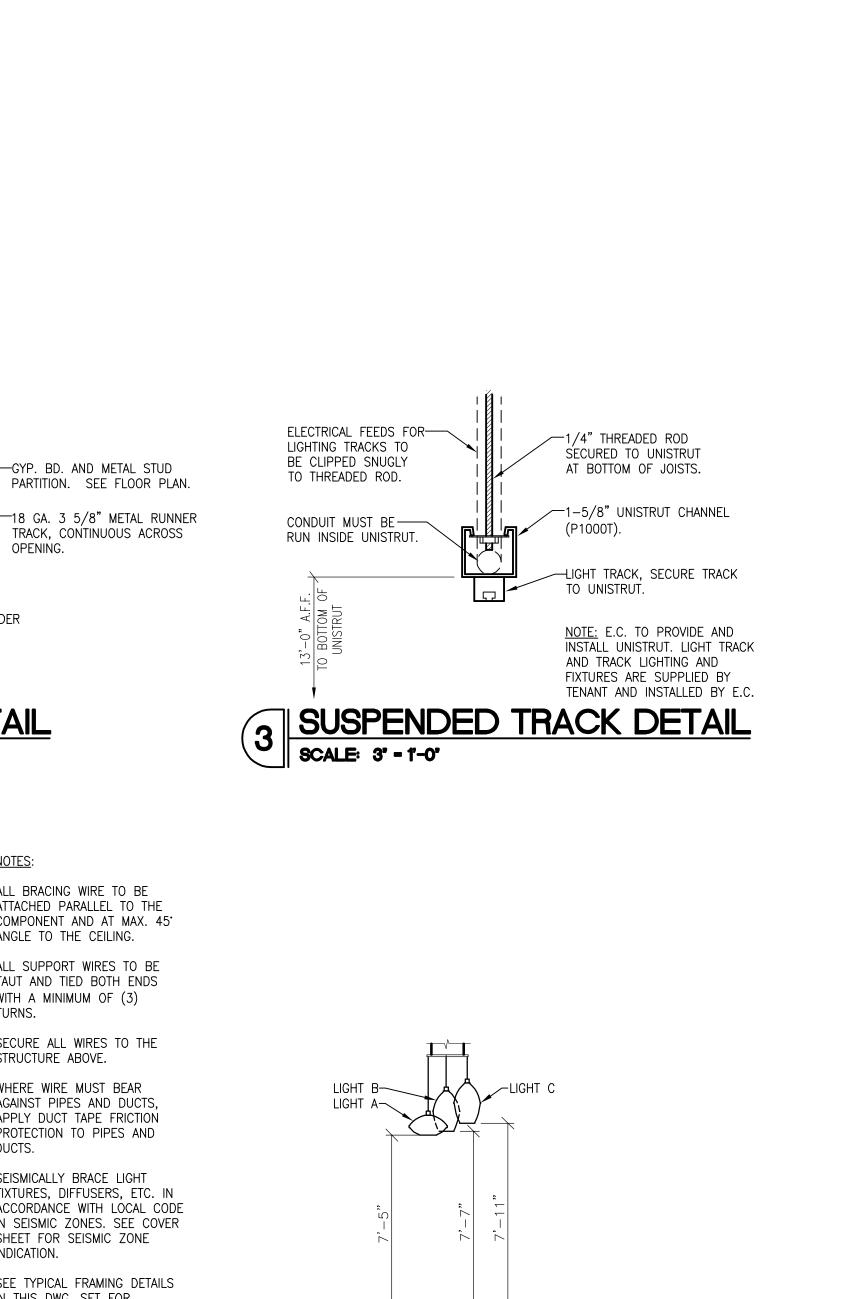
SEISMIC ZONES. 6'-0" MAX. FROM CEILING EDGES AND 12'-0" O.C. MAX. IN EACH DIRECTION

MAIN TEE 4'-0" O.C.-

CROSS TEE AT 24" O.C.-

PROVIDE VERTICAL 18 GA.-

35%" STUD 12'-0" O.C. EA. WAY AS COMPRESSION STRUT IN SEISMIC ZONES



—GYP. BD. AND METAL STUD

OPENING.

NOTES:

TURNS.

DUCTS.

IN SEISMIC ZOINES. SEE STANDIC ZONE INDICATION.

SYSTEM SUPPORT DETAIL
TOTAL SYSTEM WEIGHT NOT
TO EXCEED 4 PSF

SEE TYPICAL FRAMING DETAILS
IN THIS DWG. SET FOR
COMPRESSION STRUT

ALL BRACING WIRE TO BE ATTACHED PARALLEL TO THE COMPONENT AND AT MAX. 45°

ALL SUPPORT WIRES TO BE TAUT AND TIED BOTH ENDS

WITH A MINIMUM OF (3)

SECURE ALL WIRES TO THE STRUCTURE ABOVE.

WHERE WIRE MUST BEAR AGAINST PIPES AND DUCTS,
APPLY DUCT TAPE FRICTION

PROTECTION TO PIPES AND

SEISMICALLY BRACE LIGHT FIXTURES, DIFFUSERS, ETC. IN

IN SEISMIC ZONES. SEE COVER

COMPRESSION STRUT

ATTACHMENT TO STRUCTURE.

ACCORDANCE WITH LOCAL CODE

ANGLE TO THE CEILING.

5/8" GYP. BD. HEADER

—SUSPENDED 5/8" GYP. BD. CEILING

EDGE SUPPORT DETAIL

5 ACOUSTICAL CEILING DETAIL
SCALE: 11/2' - 1'-0'

PROVIDE 4-WAY DIAGONAL-

12 GA. BRACING WIRES IN

SEISMIC ZONES. 6'-0" MAX. FROM CEILING EDGES AND 12'-0" O.C. MAX. IN EACH

MAIN TEE 4'-0" O.C.-

CROSS TEE AT 24" O.C.—
(AND SPANNING MAIN

TEES AT 48" O.C. FOR

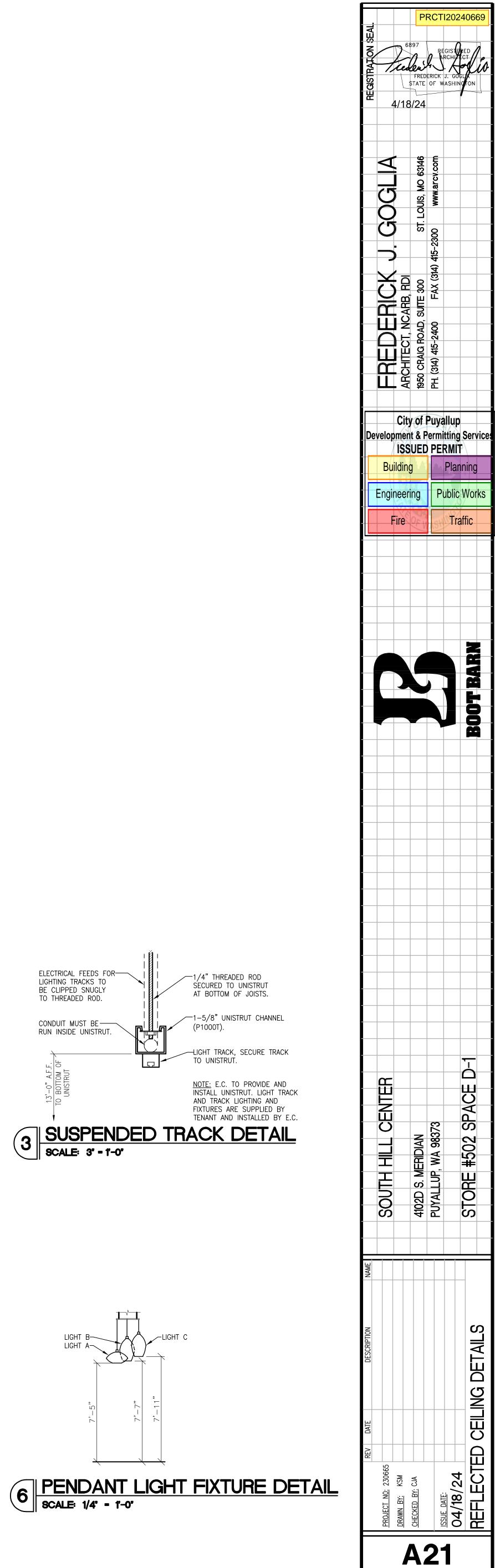
2' x 2' GRID MODULE)

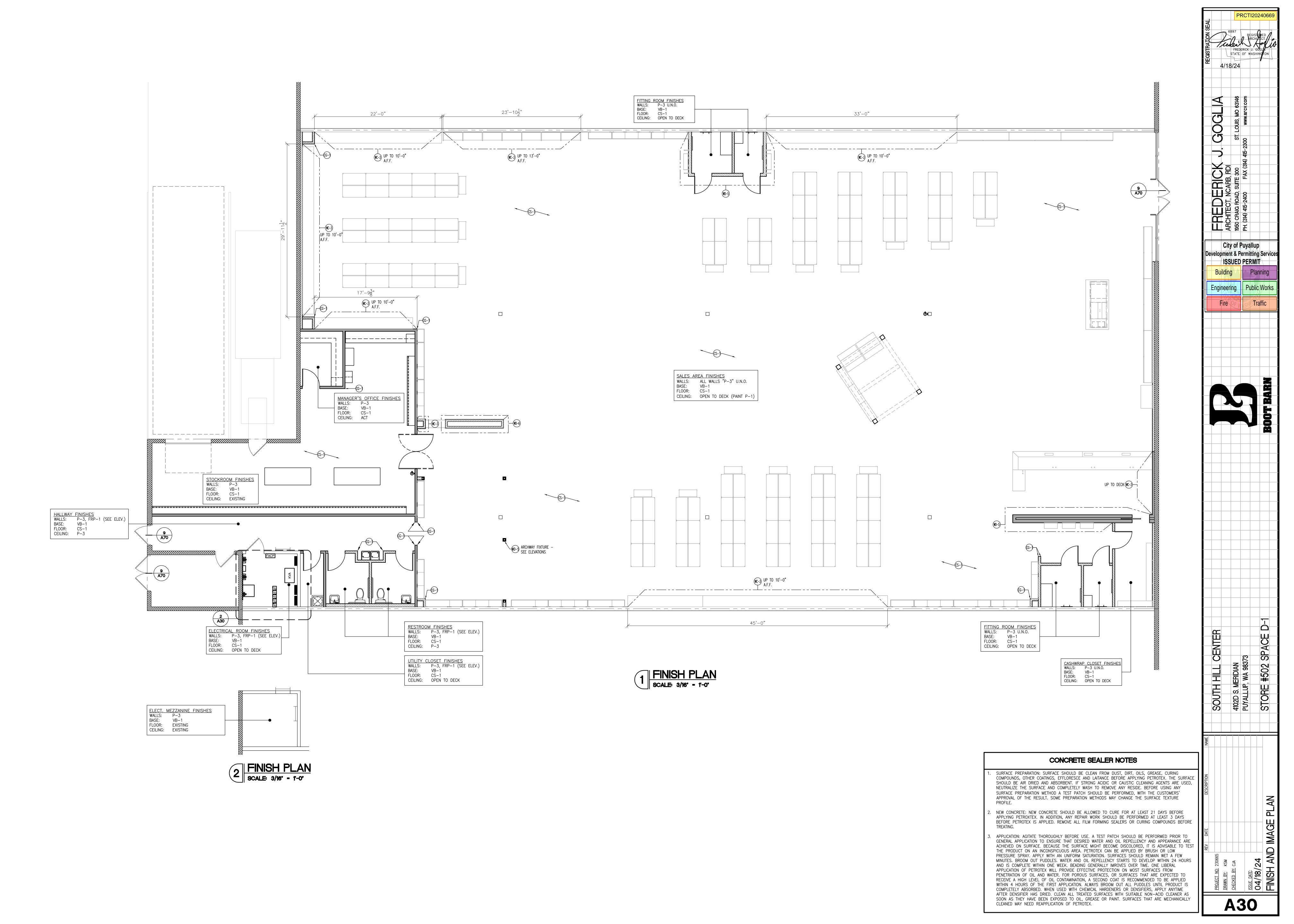
PROVIDE VERTICAL 18 GA.—

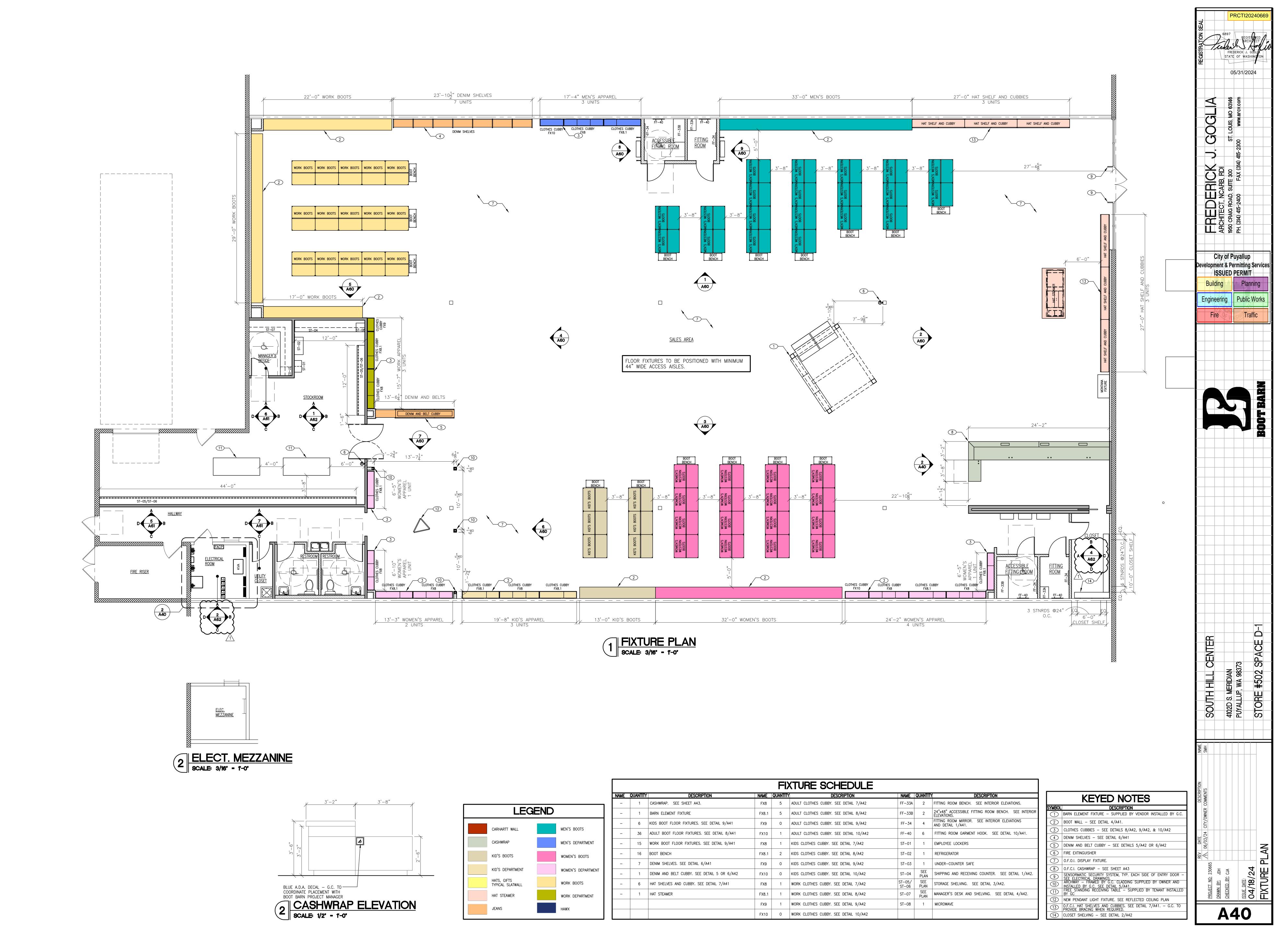
3%" STUD 12'-0" O.C. EA.
WAY AS COMPRESSION
STRUT IN SEISMIC ZONES

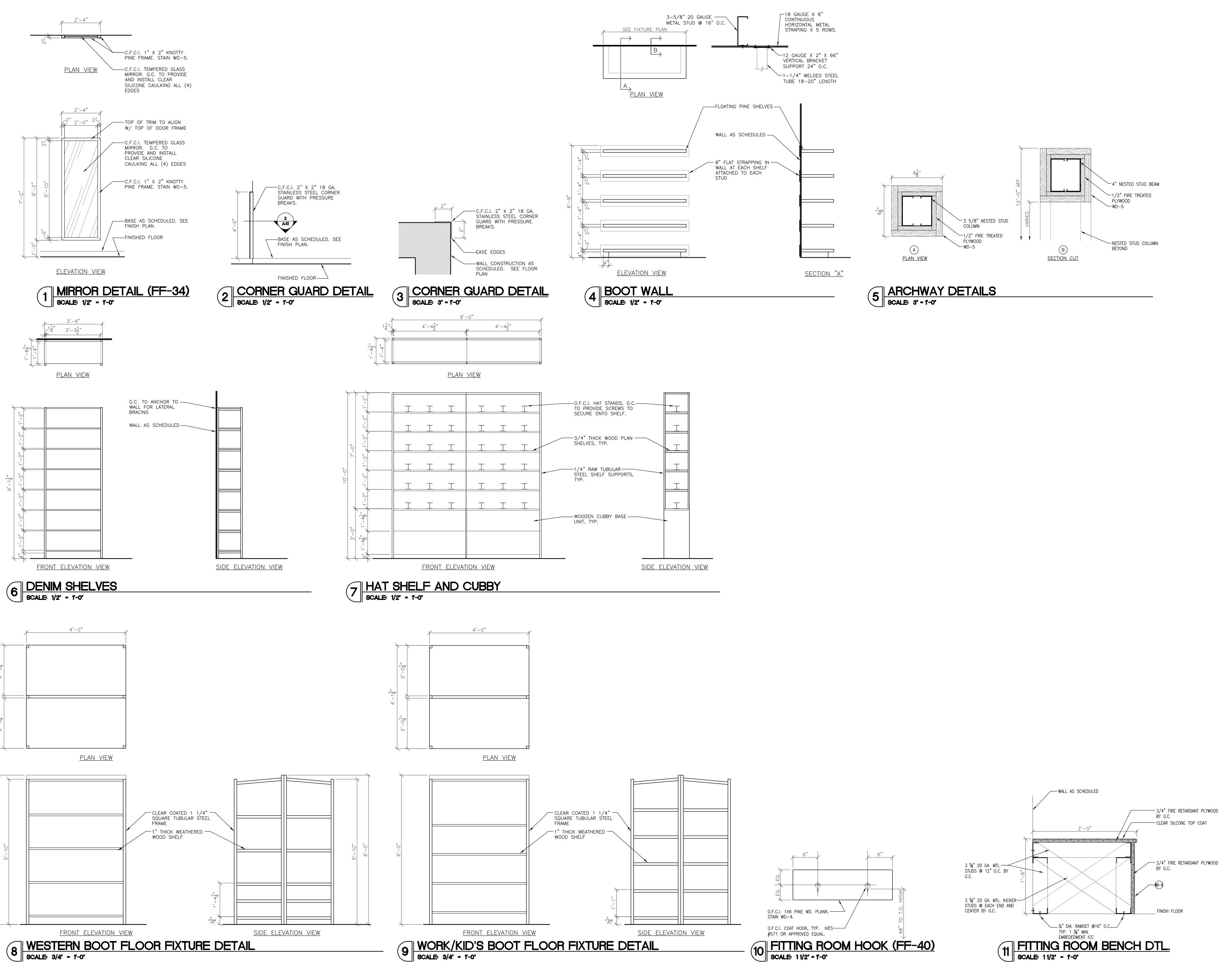
DIRECTION

PARTITION. SEE FLOOR PLAN.



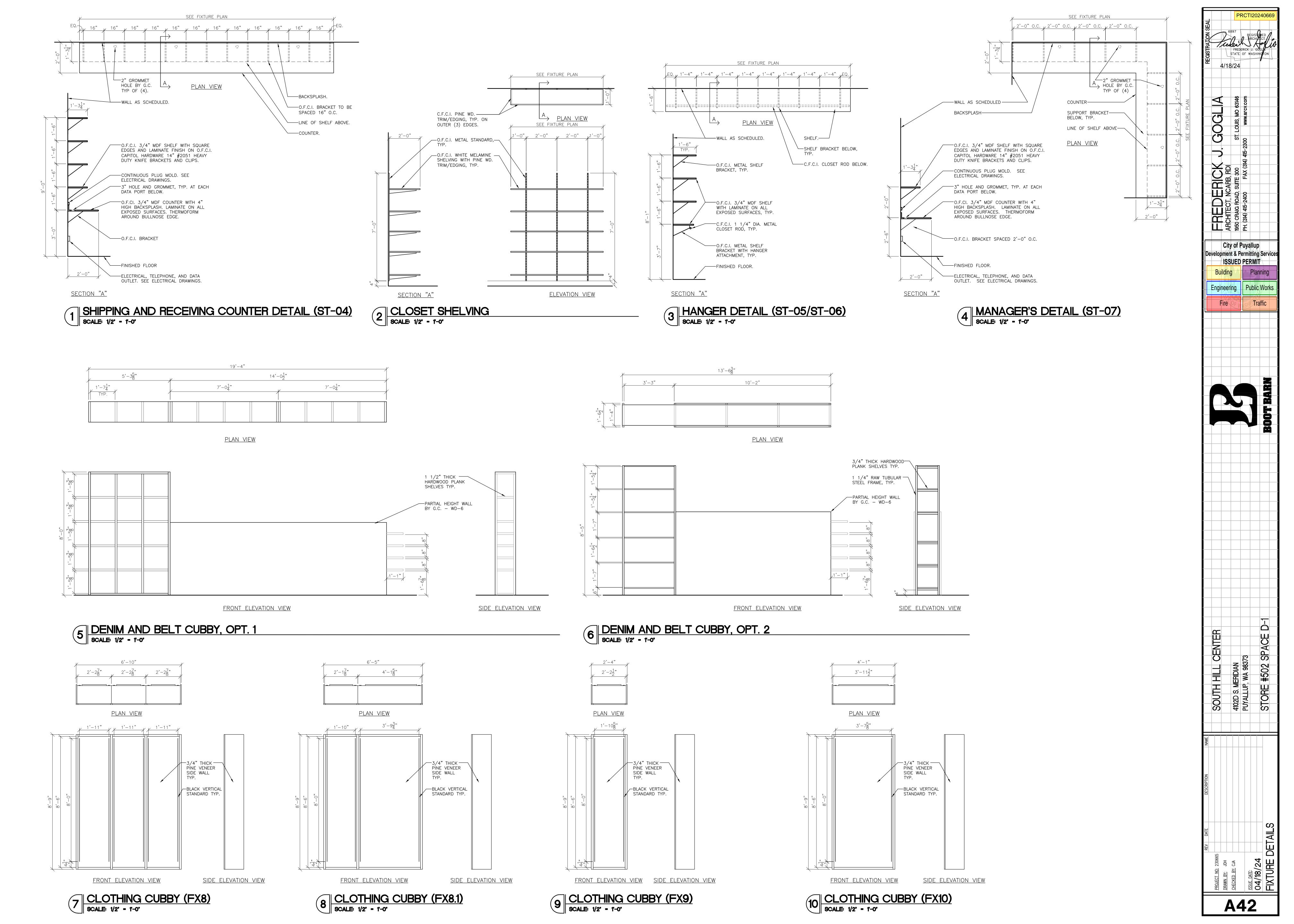


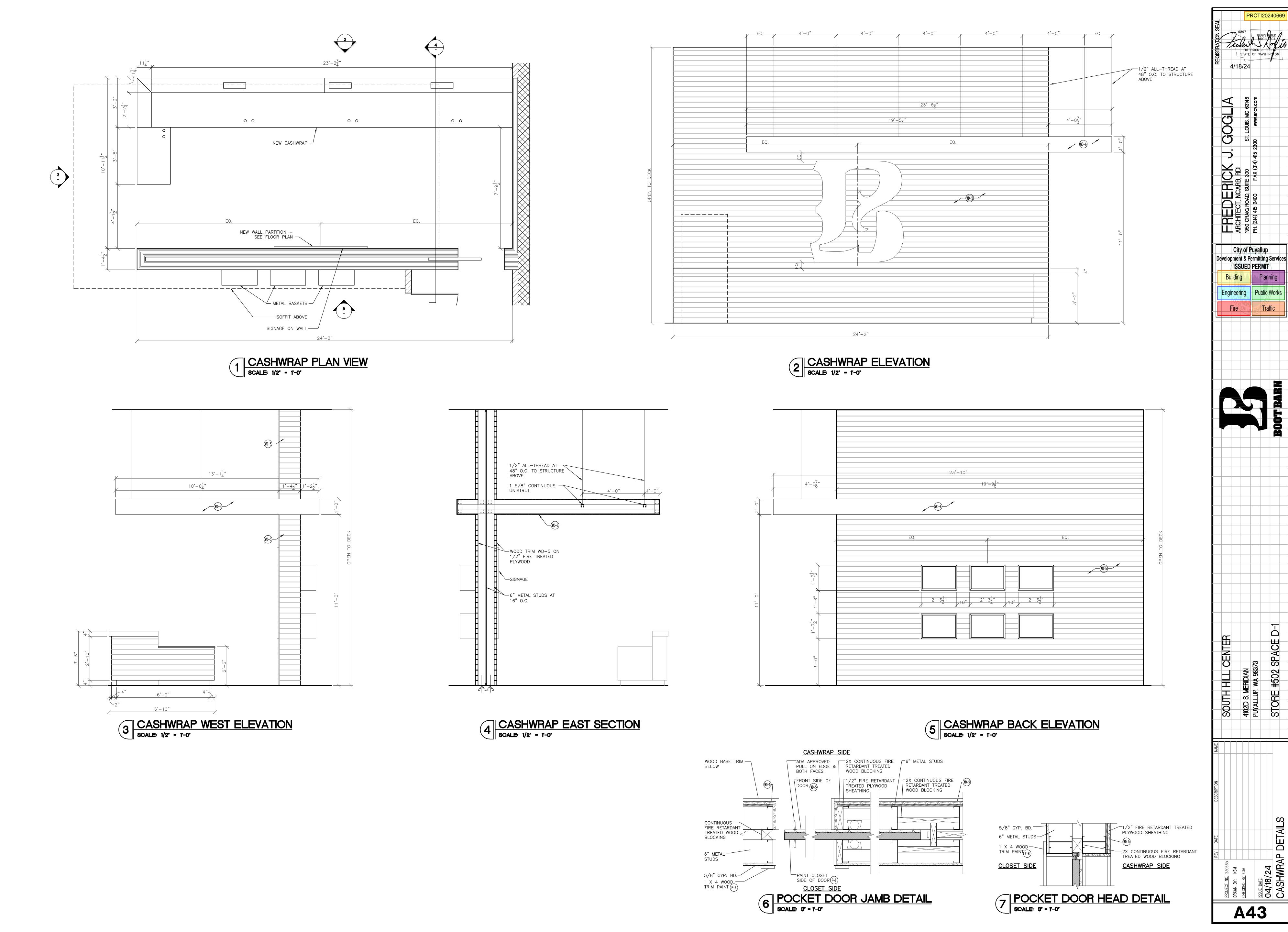


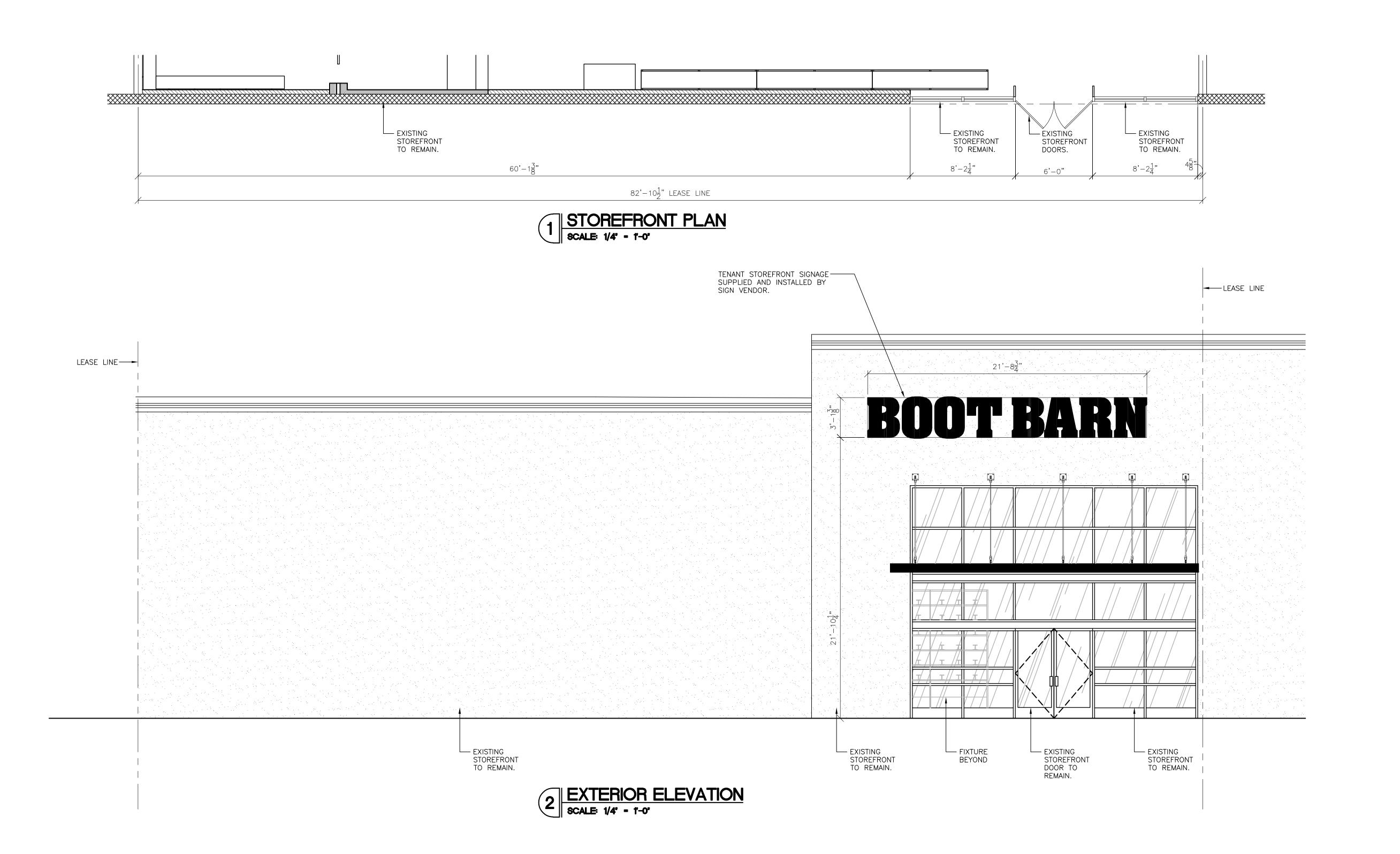


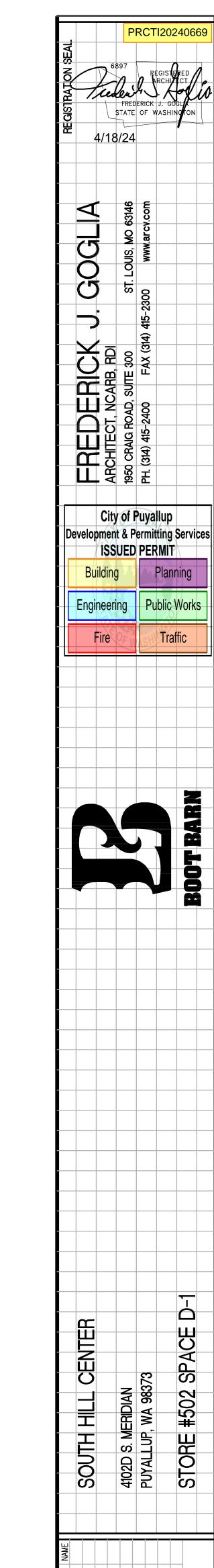
STATE OF WAS 4/18/24 City of Puyallup evelopment & Permitting Services **ISSUED PERMIT** Public Works Engineering

A41









SIGNAGE NOTES

SIGN AND SIGN PERMIT BY SIGN MANUFACTURER.

2. G.C. TO REFER TO APPROVED SIGN SHOP DRAWINGS FOR FINAL PLACEMENT PRIOR TO STOREFRONT CONSTRUCTION.

CONTRACTOR'S NOTES

WRITTEN DIMENSIONS HOLD PREFERENCE OVER SCALED DIMENSIONS. <u>DO NOT SCALE DRAWINGS</u>. CONTRACTORS MUST VISIT JOB SITE TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE SUBMITTING BIDS. REPORT ANY DISCREPANCIES OF ANY CONDITIONS WHICH MAY INTERFERE WITH THE PROPER EXECUTION OF, TO TENANT REPRESENTATIVE. REPORT DISCREPANCIES DURING BIDDING PROCESS AND BEFORE START OF CONSTRUCTION. EXTRAS WILL NOT BE ALLOWED FOR JOB OR CODE COMPLIANCE CONDITIONS AFTER COMMENCEMENT OF CONSTRUCTION.

2. FIXTURE PLAN, FLOOR PLAN, INTERIOR ELEVATION SHEET, REFLECTED CEILING PLAN, AND DEMOLITION PLAN ARE OF THIS SPECIFIC STORE. DETAIL SHEETS A42 AND A71 ARE GENERAL AND MAY OR MAY NOT BE STORE—SPECIFIC.

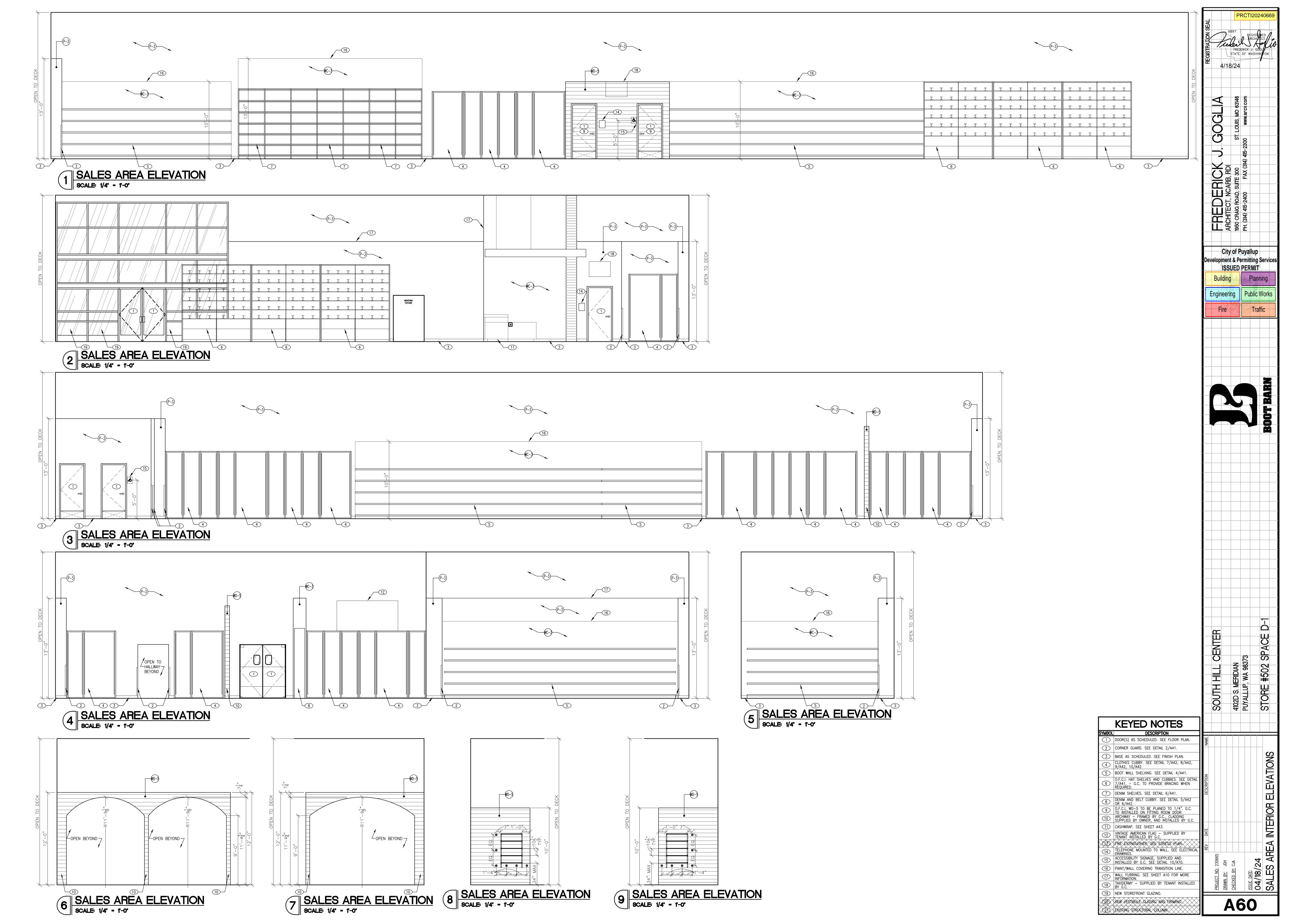
PROJECT NO: 230665

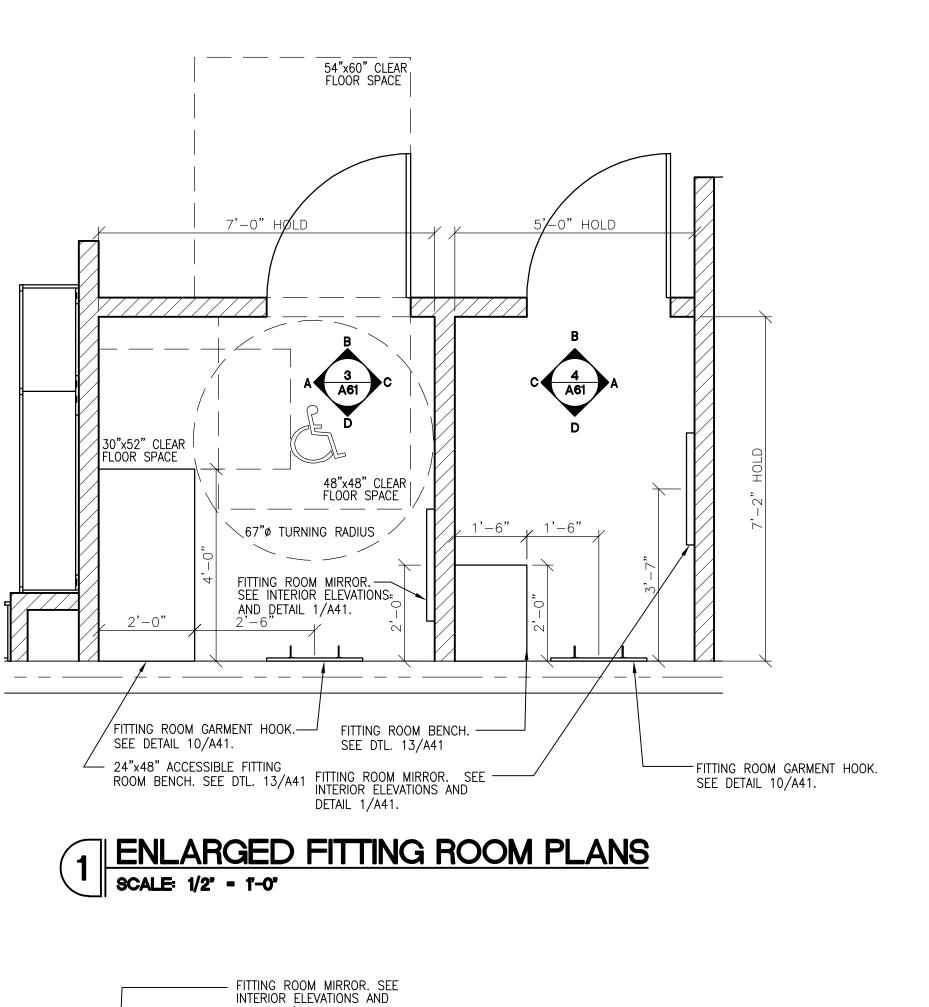
DRAWN BY: JDH
CHECKED BY: CJA

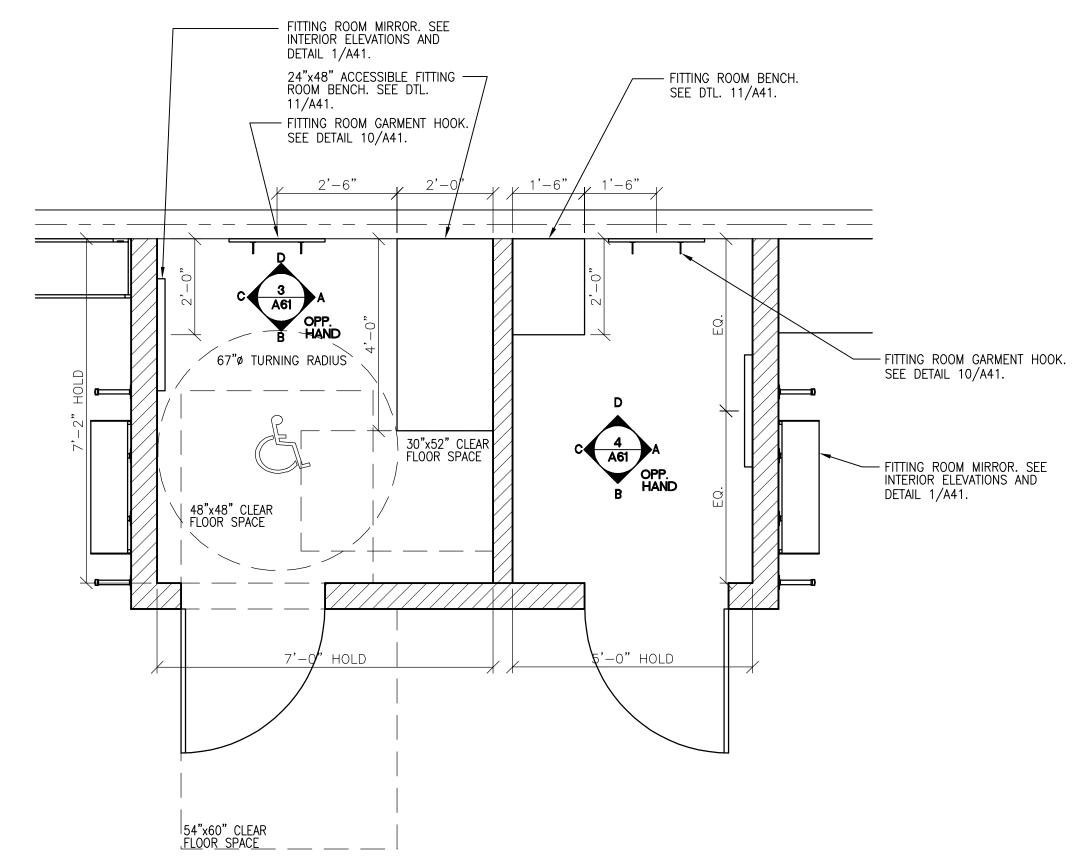
SSUE DATE:

04/18/24

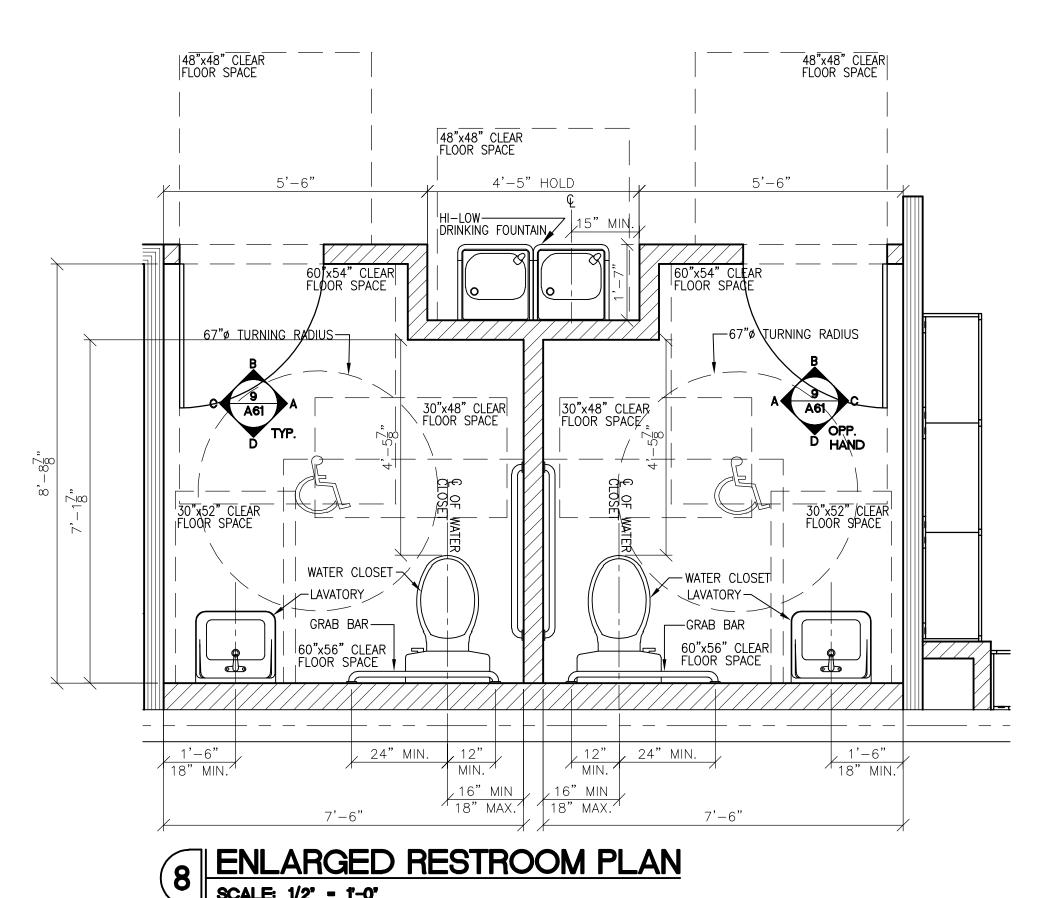
EXTERIOR FI EVATIONS



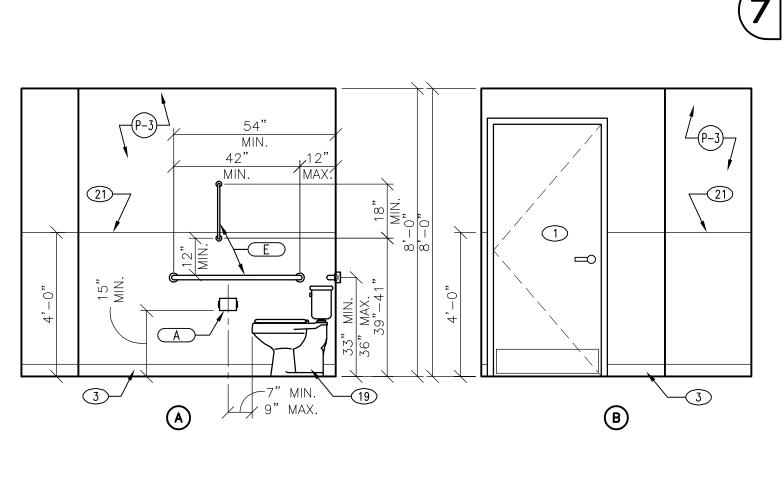


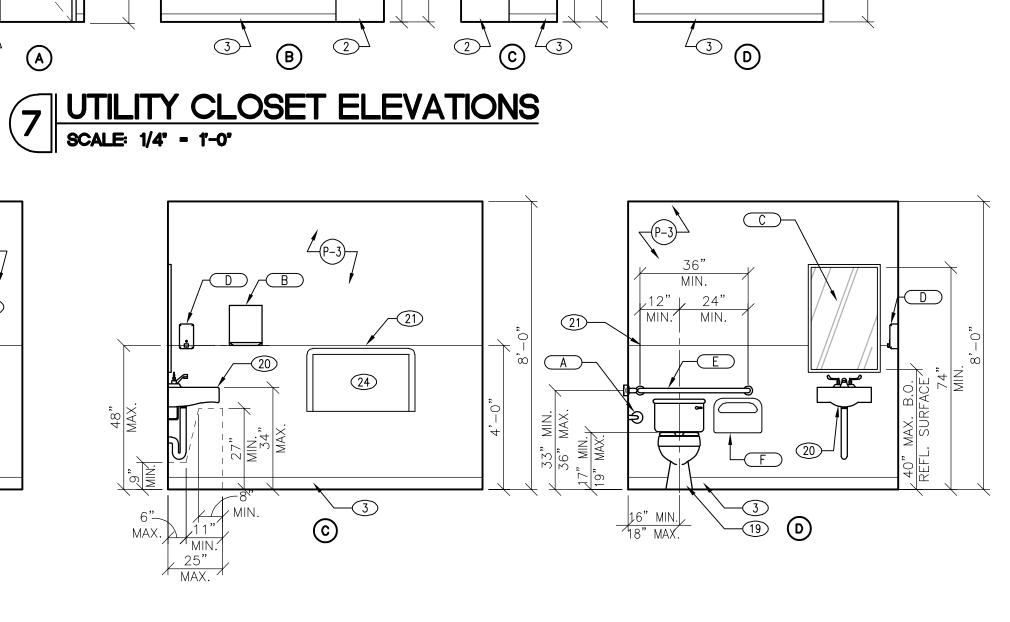


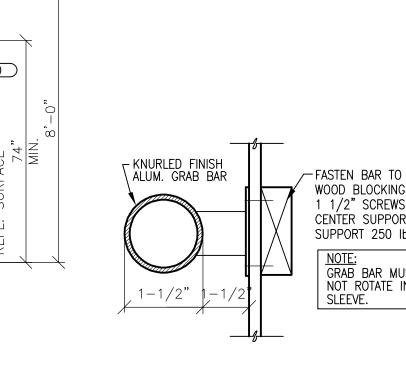
2 ENLARGED FITTING ROOM PLANS SCALE: 1/2" - 1"-0"



SCALE: 1/2" - 1'-0"





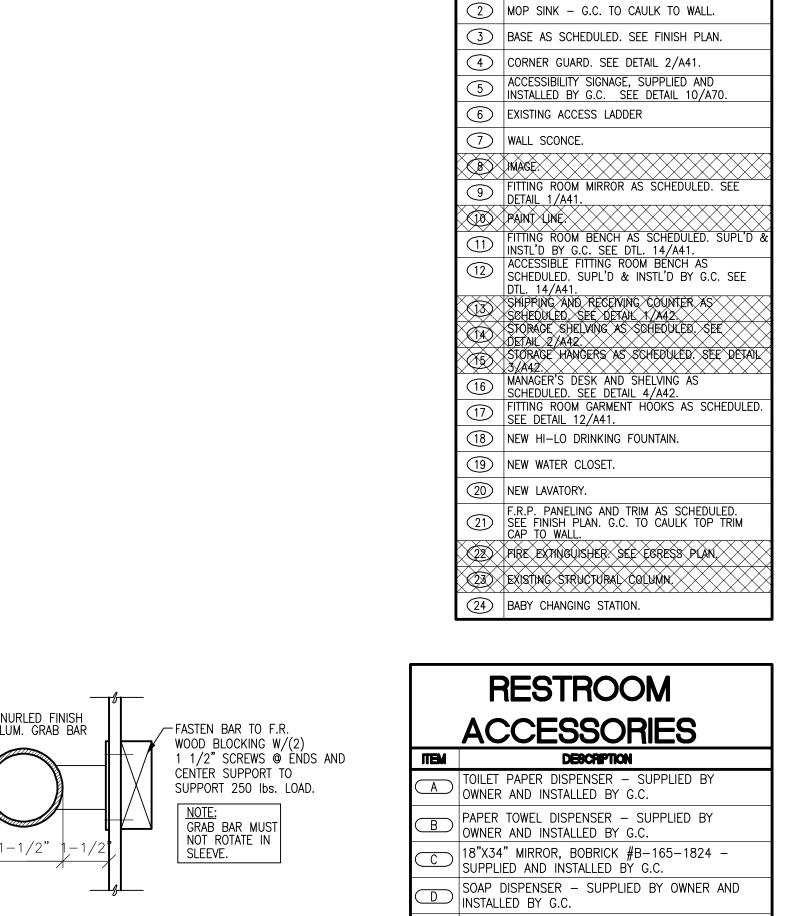


FASTEN BAR TO F.R.
WOOD BLOCKING W/(2) CENTER SUPPORT TO SUPPORT 250 lbs. LOAD. NOTE: GRAB BAR MUST NOT ROTATE IN SLEEVE.

SECTION A-A

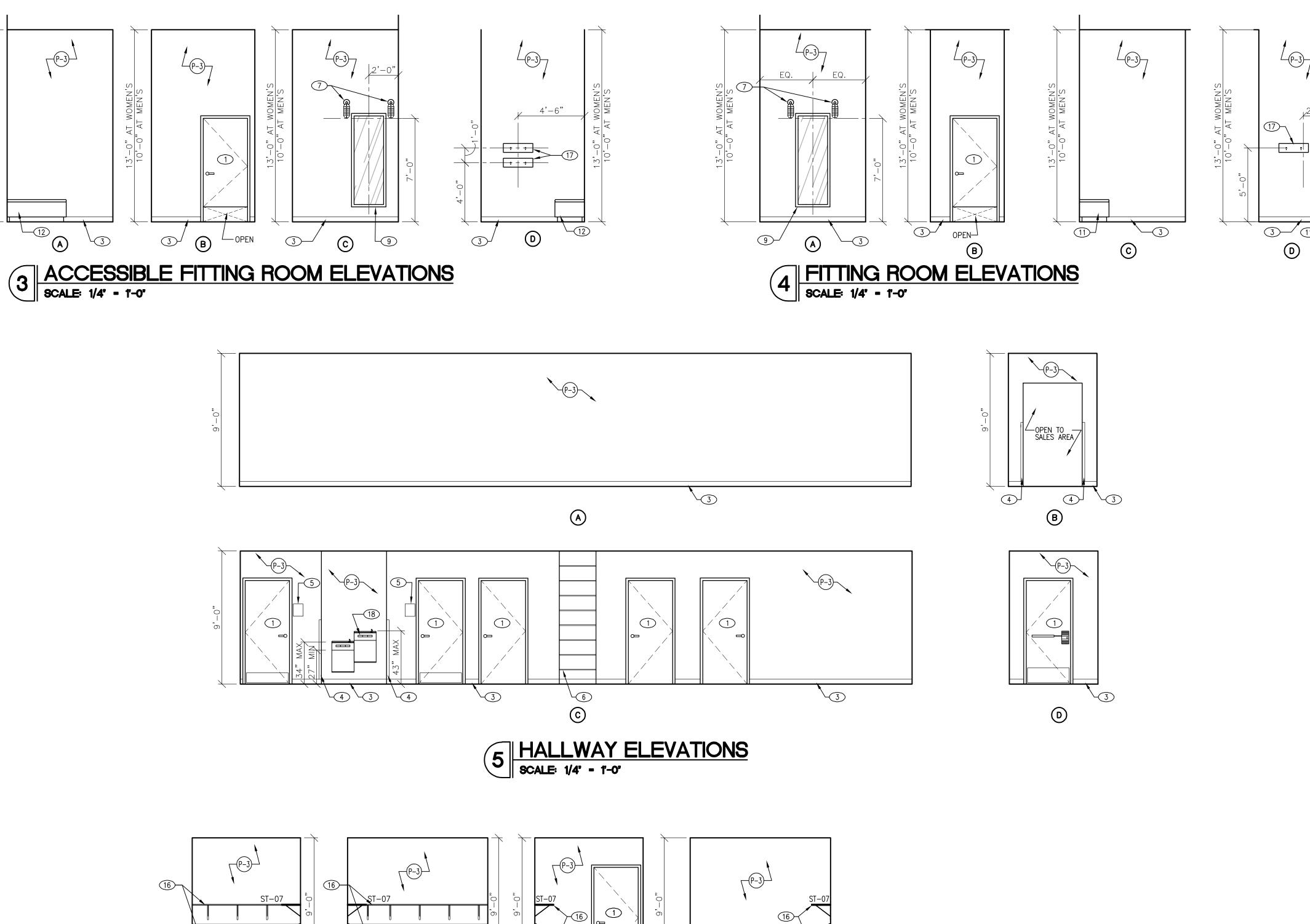
4/18/24 City of Puyallup Development & Permitting Services **ISSUED PERMIT** Engineering Public Works **KEYED NOTES** DOOR(S) AS SCHEDULED. SEE FLOOR PLAN. SOUTH HILL CENTER STORE

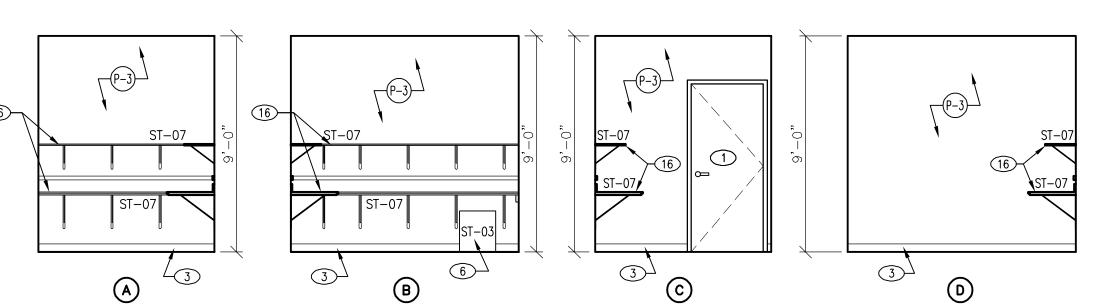
A61



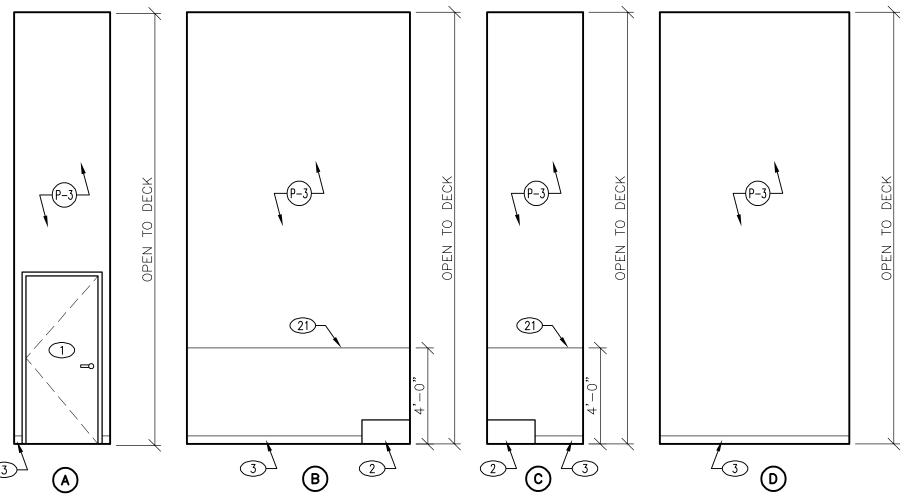
E GRAB BAR, SEE SECTION A-A.

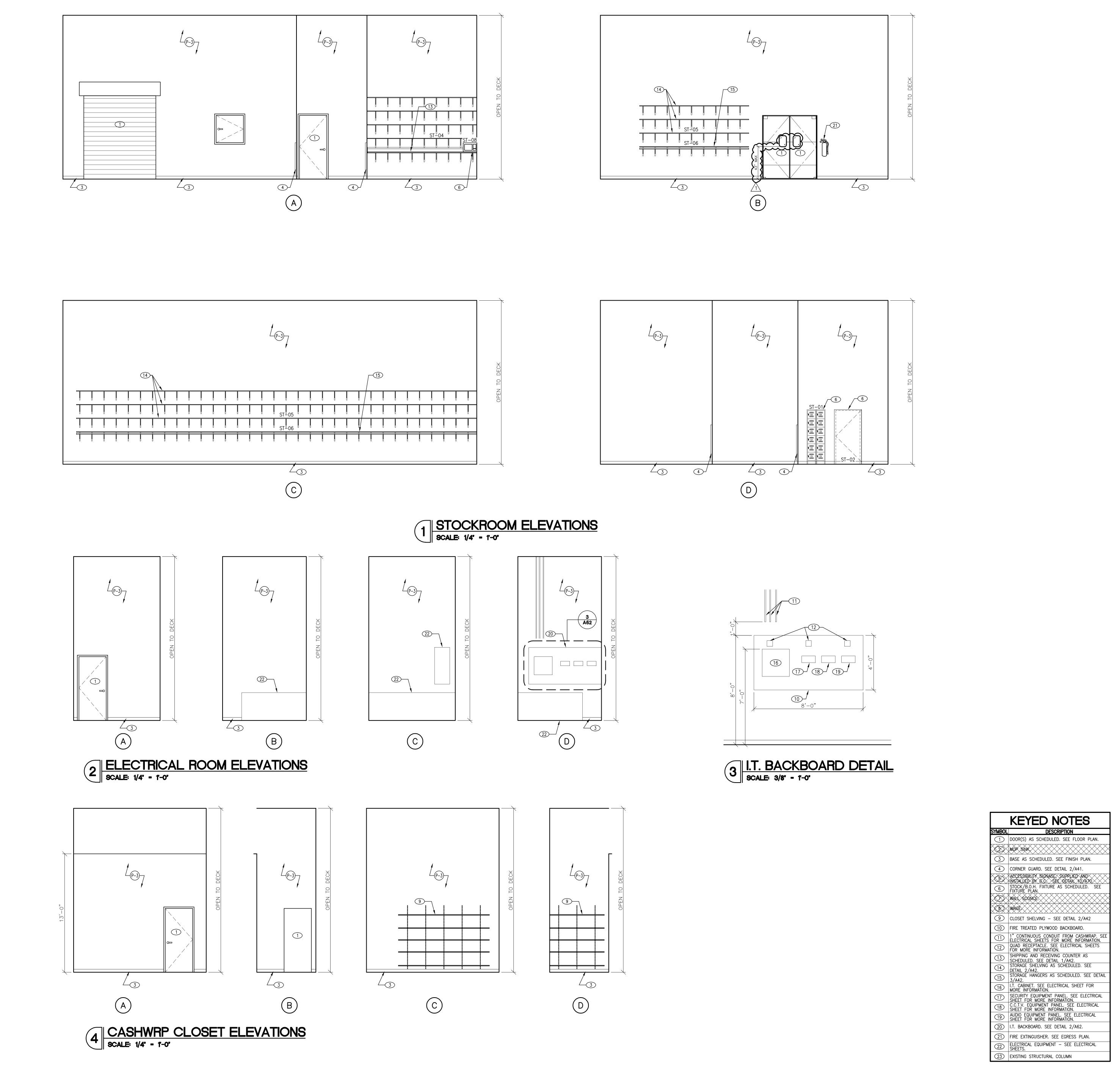
TOILET SEAT COVER DISPENSER, SUPPLIED BY OWNER AND INSTALLED BY G.C.





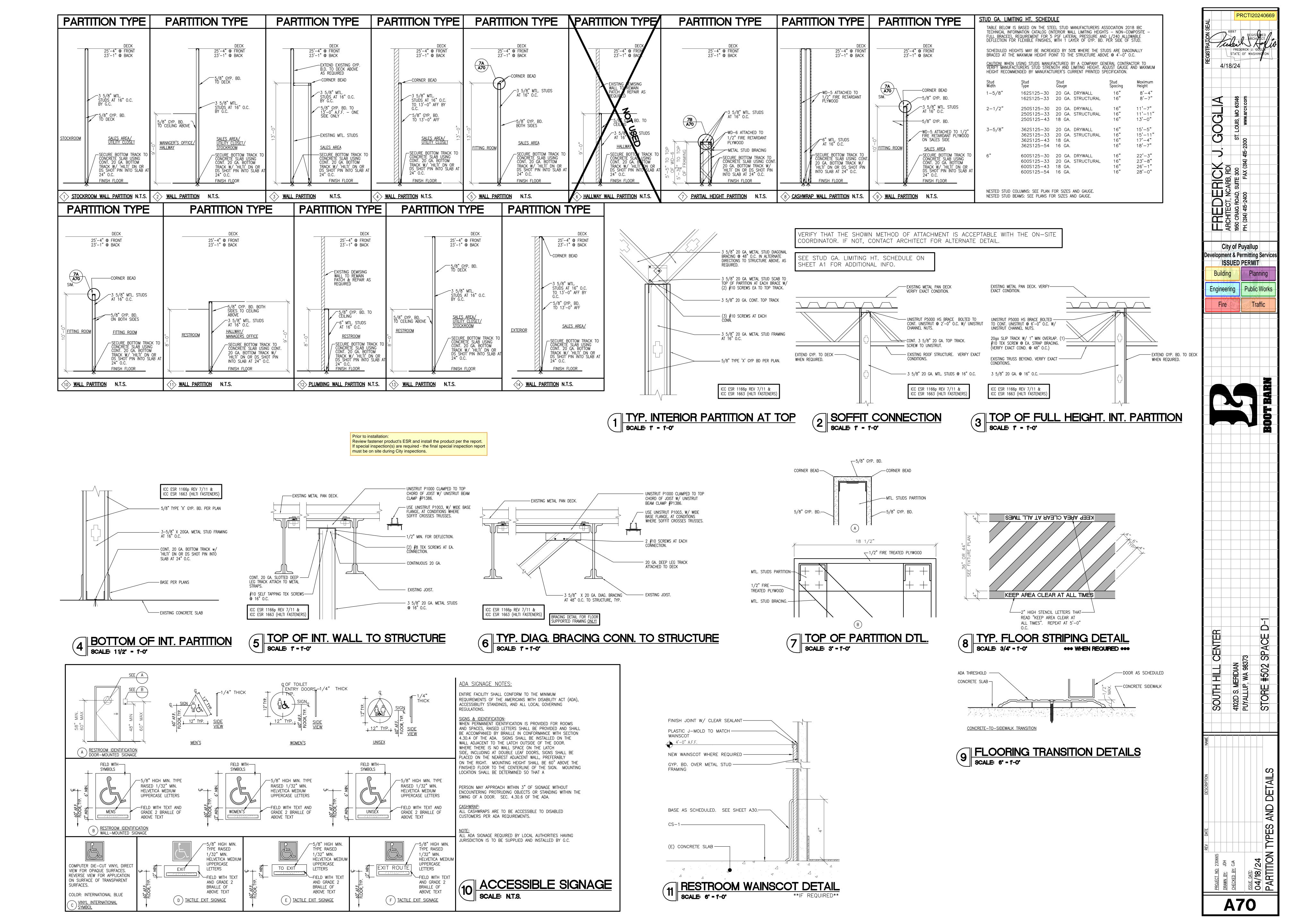
6 MANAGER'S OFFICE ELEVATIONS SCALE: 1/4" - 1'-0"





05/31/2024 City of Puyallup
Development & Permitting Services ISSUED PERMIT SOUTH HILL CENTER 4102D S. MERIDIAN PUYALLUP, WA 983 STORE **A62**

KEYED NOTES



A. THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS, SHALL FORM A PART OF THIS SECTION

OF THE SPECIFICATIONS. B. REFERENCE IS MADE TO REQUISITES FOR BIDDERS AND CONTRACTORS UNDER OTHER SECTIONS OF THESE SPECIFICATIONS, WHICH SHALL BE CONSIDERED BINDING, UNLESS OTHERWISE NOTED UNDER THIS SECTION.

EACH CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE CONSTRUCTION DETAILS, BOTH ON TENANT CONSTRUCTION DRAWINGS AND LANDLORD'S AS REFERRED TO, BEFORE SUBMITTING HIS BID AS NO ALLOWANCES WILL BE MADE BECAUSE OF CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION.

INSPECTION OF SITE ALL PROPOSALS SHALL PRECLUDE THAT CONTRACTOR IS FAMILIAR WITH JOBSITE CONDITIONS AND UTILITY LOCATIONS AND THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY

RESPONSIBILITY. ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE SUBCONTRACTOR INVOLVED.

ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS OR AS DIRECTED BY THE OWNER, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, AND/OR REGULATIONS OF THE GOVERNING BODIES, WHETHER SO SHOWN OR NOT, AND ALL MODIFICATIONS REQUIRED BY SUCH AUTHORITIES SHALL BE MADE BY THE CONTRACTOR WITHOUT ANY ADDITIONAL COST TO OWNER.

MATERIALS AND WORKMANSHIP

A. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURERS, AND UNLESS OTHERWISE SPECIFIED SHALL BE NEW, AND FREE FROM ANY AND ALL DEFECTS. LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY UNLESS OTHERWISE SPECIFIED.

B. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION AND COMPLETION, INSTALLATION SHALL BE THOROUGHLY CLEANED OF ALL DEBRIS PRESENT AS A RESULT OF THIS CONTRACT AND SHALL BE REMOVED FROM THE PREMISES, DO NOT ABANDON.

EACH SUBCONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN AND SPECIFIED. IF A SUBCONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT A VARIANCE, HE SHALL PROMPTLY $\,$ NOTIFY THE $\,$ GENERAL CONTRACTOR AND THE TENANT IN WRITING. IF ANY SUBCONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO LAWS, ORDINANCES, RULES AND REGULATIONS AND WITHOUT GIVING SUCH NOTICE, THE SUBCONTRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

<u>PROTECTION OF WORK AND PROPERTY</u> A. EACH SUBCONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL HIS WORK FROM DAMAGE AND SHALL PROTECT THE OWNER'S PROPERTY FROM INJURY OR LOSS ARISING FROM HIS WORK. ANY SUCH DAMAGE, INJURY, OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO CAUSES BEYOND HIS CONTROL AND NOT TO HIS FAULT OR NEGLIGENCE, SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR. HE SHALL ADEQUATELY PROTECT ADJACENT PROPERTY AS WELL

B. EACH SUBCONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THEIR EMPLOYEES ON THE WORK AND SHALL COMPLY WITH ALL PROVISIONS OF FEDERAL, STATE AND LOCAL BUILDING CODES AND SAFETY LAWS TO PREVENT ACCIDENTS OR INJURY TO PERSONS ON OR ADJACENT TO THE PREMISES WHERE THE WORK IS BEING PERFORMED. EACH SUBCONTRACTOR SHALL MAINTAIN ALL INSURANCE REQUIRED TO PROTECT HIMSELF, THE OWNER AND TENANT FOR THE DURATION OF THE WORK AGAINST PROPERTY DAMAGE AND PUBLIC LIABILITY.

HE TENANT. WITHOUT INVALIDATING THE CONTRACT. MAY ORDER EXTRA WORK OR MAKE CHANGES BY ALTERING, ADDING TO, OR DEDUCTING FROM THE WORK, WITH CONTRACT SUM BEING ADJUSTED ACCORDINGLY.

<u>COOPERATION</u> ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CONJUNCTION WITH OTHER CONTRACTORS AND TRADES OF THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH CONTRACTOR AND TRADE SUFFICIENT TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS CONTRACTS. CONTRACTORS SHALL CONTACT OWNER FOR INSTRUCTIONS SHOULD ANY QUESTIONS ARISE BETWEEN TRADES AS TO THE INSTALLATION OF LINES, DUCTS, CONDUITS, FIXTURES, OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OR STRENGTH OF THE STRUCTURE.

<u>SUBSTITUTION OF MATERIALS</u> MANUFACTURERS ARE LISTED ON PLANS TO ESTABLISH A STANDARD. THE PRODUCTS OF OTHER MANUFACTURERS WILL BE ACCEPTABLE, IF IN THE OPINION OF THE TENANT, THE SUBSTITUTE MATERIAL IS OF QUALITY EQUAL TO OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY, FOR THE PURPOSE OF WHICH THE ITEMS SPECIFIED WERE INTENDED.

<u>SHOP DRAWINGS</u> SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND SYSTEMS, AND OTHER SUCH ILLUSTRATIVE MATERIAL THAT MAY BE CONSIDERED NECESSARY BY THE TENANT, SHALL BE SUBMITTED BY THIS CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND/OR CONSTRUCTION MODIFICATIONS.

DRAWINGS AND SPECIFICATIONS THE DRAWINGS DIAGRAMMATICALLY INDICATE THE LOCATIONS OF THE VARIOUS LINES. DUCTS, CONDUITS, FIXTURES, AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY

CONNECTION IN DETAIL AND ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM. B. SHOULD ANY CHANGES BE DEEMED NECESSARY BY THE CONTRACTOR, TO ANY ITEMS SHOWN ON CONTRACT DRAWINGS, SHOP DRAWINGS, DESCRIPTIONS, AND THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED IN HIS CONTRACT. HE SHALL PRODUCE COMPLETE AND FULLY OPERATIONAL SYSTEMS AND PROVIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS WORK, REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED. FOR EXAMPLE, ON SINK INSTALLATIONS, ESCUTCHEONS SHALL BE PROVIDED FOR COUNTERTOP PENETRATIONS, ALTHOUGH THEY WERE NOT SPECIFICALLY IDENTIFIED IN THE CONTRACT DOCUMENTS:

B. CONTRACTOR SHALL SUPPLY TO LANDLORD AND TENANT A CERTIFIED AIR BALANCE REPORT AT COMPLETION OF PROJECT. THIS SHALL BE REQUIRED FOR BOTH REMODELED AND NEW STORES.

HEATING, VENTILATING AND AIR CONDITIONING

A. THE WORK COVERED BY THIS SECTION OF THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RESPECTIVE DRAWINGS, INFORMATION OR INSTRUCTIONS TO BIDDERS, GENERAL CONDITIONS, ADDENDA, OR DIRECTIVES WHICH MAY BE ISSUED BY THE OWNER, SHALL BE COMPLIED WITH IN EVERY

ASPECT B. THE LISTING HEREIN OF AN ARTICLE OR MATERIAL, OPERATION OR METHOD, REQUIRES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL EACH ITEM LISTED, UNLESS SPECIFICALLY NOTED TO THE CONTRACTOR SHALL PERFORM EACH OPERATION PRESCRIBED OR LISTED ACCORDING TO THE CONDITIONS STATED.

<u>EXAMINATION OF SITE</u> ALL CONTRACTORS SUBMITTING PROPOSALS FOR THIS WORK SHALL FIRST EXAMINE THE SITE AND ALL EXISTING CONDITIONS AFFECTING HIS WORK. ALL PROPOSALS SHALL SPECIFY, IN WRITING, ALL SUCH CONDITIONS THAT MAY ALTER OR AFFECT THE WORK UNDER THIS CONTRACT.

FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR A COMPLETE AND FULLY OPERATIONAL HEATING, VENTILATING, AND AIR CONDITIONING SYSTEM EXCEPT AS SPECIFICALLY EXCLUDED BY DRAWINGS AND/OR BY TENANT'S DIRECTIONS.

EQUIPMENT

A. EXISTING ROOFTOP UNITS WITH GAS HEAT TO REMAIN. SEE SCHEDULES THIS

SHEET. B. FILTERS - TWO INCH STANDARD FILTERS SHALL BE FACTORY SUPPLIED ON ALL UNITS. FILTERS SHALL BE OF THE THROW AWAY TYPE WHEREVER POSSIBLE. IF

LIFT HANDLE. C. THE HVAC SUBCONTRACTOR SHALL IDENTIFY ALL ROOF MOUNTED HVAC EQUIPMENT AND RELATED ACCESSORIES WITH 2" HIGH PAINTED STENCILED LETTERS OF THE STORE NAME AND EQUIP DESIGNATION ON ALL SIDES OF

D. EXHAUST FANS - TOILET AND JANITOR CLOSET EXHAUST FANS - REFER TO M10 SHEET FOR ADDITIONAL INFORMATION.

E. ALL HVAC UNITS SHALL BE EQUIPPED WITH 7-DAY PROGRAMMABLE THERMOSTAT (HONEYWELL COMMERCIAL PRO WITH REMOTE SENSOR). T-STAT SHALL HAVE 2 HEAT/2 COOL CYCLE, AUTO CHANGE OVER, AND BE HEAT PUMP COMPATIBLE. STANDARD CAPABILITIES SHALL BE AS FOLLOWS:

CAPABLE OF MAINTAINING A 5°F DEADBAND.

CAPABLE OF 85'F COOLING SETBACK AND 55'F HEATING SETBACK. CAPABLE OF MAINTAINING PROGRAMMED SETTING FOR AT LEAST 24 HOURS WITHOUT POWER. CAPABLE OF 7 DIFFERENT 7 SCHEDULES. CAPABLE OF MAINTAINING PROGRAMMED SETTING FOR AT LEAST 10 HOURS WITHOUT POWER.

CAPABLE OF A 4 HOUR OVERRIDE ACCESSIBLE TO MANAGER. T-STAT SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND

DESIGN SETTINGS SHALL BE AS FOLLOWS - COORDINATE WITH PM: COOLING: 72°F OCCUPIED COOLING TEMPERATURE HEATING: 67'F OCCUPIED HEATING TEMPERATURE SET TO AUTO HEAT/COOL CHANGEOVER. DO NOT USE SETBACKS. FAN: CONTINUOUS IN OCCUPIED MODE AND WITH HEATING OR COOLING

EQUIPMENT IN UNOCCUPIED MODE. A. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED OF NEW

SMACNA STANDARDS. ALL ROUND DUCTWORK SHALL BE SPIRAL SEAM. B. ALL SUPPLY AND RETURN AIR DUCTS DUCTS IN CEILING PLENUMS SHALL BE GALVANIZED STEEL WITH 1-1/2" THICK (MINIMUM R-4.2) EXTERNAL ACOUSTICAL AND THERMAL INSULATION. (PLENUM IS INDIRECTLY CONDITIONED

GALVANIZED PRIME GRADE SHEET STEEL PER THE LATEST EDITION OF THE

C. ALL OUTSIDE AIR DUCTS DUCTS SHALL BE GALVANIZED STEEL WITH 3" THICK (MINIMUM R-8) EXTERNAL ACOUSTICAL AND THERMAL INSULATION. D. CONTRACTOR SHALL SUPPLY AND INSTALL INSECT SCREENS ON ALL DUCT OPENINGS WHICH TERMINATE OUTDOORS. INSECT SCREENS SHALL BE 10 GAUGE, ONE-HALF INCH (1/2") MESH IN REMOVABLE GALVANIZED STEEL

E. ALL DUCTWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN THE LATEST EDITION OF THE AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING ENGINEERS GUIDE (ASHRAE), FABRICATED AND INSTALLED IN ACCORDANCE WITH THE METHODS RECOMMENDED IN THE LATEST EDITION OF THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE.

1. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK MUST BE SECURELY SEALED USING WELDMENTS, MECHANICAL FASTENERS WITH SEALS, GASKETS, OR MASTICS, MESH AND MASTIC SEALING SYSTEMS, OR TAPES. TAPES AND MASTICS MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR UL 181B. ALL LONGITUDINAL AND TRANSVERSE JOINTS, SEAMS AND CONNECTIONS OF SUPPLY AND RETURN DUCTS OPERATING AT STATIC PRESSURES LESS THAN OR EQUAL TO 2" W.G. SHALL BE SECURELY FASTENED AND SEALED WITH WELDS GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS-EMBEDDED FABRIC SYSTEMS OR TAPES INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

2. MECHANICAL FLEXIBLE CONNECTORS (FASTENERS AND SEALS, MASTICS, OR GASKETS) MUST BE USED WHEN CONNECTING DUCTS TO FANS AND OTHER AIR DISTRIBUTION EQUIPMENT.

FLEXIBLE AIR DUCT FOR CONNECTIONS BETWEEN MAINS AND DIFFUSER SHALL BE AIR DUCT LISTED BY UNDERWRITERS LABORATORIES UNDER UL STANDARD 181 AS A CLASS 1 FLEXIBLE AIR DUCT AND COMPLYING WITH NFPA STANDARDS 90A AND 90B, DUCT SHALL BE FACTORY MADE AND COMPOSED OF A CPE LINER DUCT PERMANENTLY BOUNDED TO A COATED SPRING STEEL WIRE HELIX AND SUPPORTING A FIBER GLASS INSULATING BLANKET R.-6.0 LOW PERMEABILITY OUTER VAPOR BARRIER OF FIBER GLASS REINFORCED FILM LAMINATE SHALL COMPLETE THE COMPOSITE. MAX LENGTH SHALL BE 5'-0". WHEN FLEXIBLE RUN INCLUDES AN ELBOW. IT SHALL HAVE REINFORCEMENT EQUAL TO TITUS FLEXRIGHT.

G. EXCEPTION: DUCTWORK FOR EXHAUST OR OUTSIDE SUPPLY AIR SHALL BE ALL METAL AND CONSTRUCTED ACCORDING TO RECOMMENDED PRACTICES OF THE LATEST ISSUE OF ASHRAE.

A. HANGER DESIGN SHALL BE AS DESCRIBED IN THE LATEST EDITION OF THE "SMACNA" MANUAL. REINFORCEMENT MEMBERS MAY BE USED TO SUPPORT DUCT SYSTEM PROVIDED DETAILS OUTLINED IN THE "SMACNA" MANUAL ARE

B. ALL DUCTS SHALL BE REINFORCED ACCORDING TO THE LATEST EDITION OF SMACNA MANUAL. MATERIALS FOR REINFORCEMENT MEMBERS SHALL BE GALVANIZED STEEL. ALL SCREWS AND WASHERS SHALL BE PLATED OR GALVANIZED.

C. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND LESS SHALL BE SUPPORTED BY MEANS OF BAND IRON HANGERS OF NO. 18 U.S. GAUGE ATTACHED TO DUCT BY MEANS OF RIVETS, SCREWS OR CLAMPS, AND FASTENED TO STRUCTURE ABOVE BY TOGGLE BOLTS OR OTHER MEANS. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND MORE SHALL BE SUPPORTED BY MEANS OF ANGLE IRON TRAPEZE HANGERS.

D. DUCTS SHALL BE SUPPORTED AT ALL TURNS AND TRANSITIONS AND NOT MORE THAN 8'-0" O.C. STRAIGHT DUCTS UP TO 59" MAX. DIMENSIONS SHALL BE SUPPORTED 6'-0" O.C. DUCTS OVER 60" MAX. DIMENSIONS SHALL BE SUPPORTED AT 4'-0" O.C.

E. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS. F. VERTICAL DUCTS SHALL BE SUPPORTED WITH $1-1/4" \times 1-1/4" \times 1/4"$

ANGLES AT FLOOR PENETRATIONS.

A. SPLITTER DAMPERS SHALL BE FABRICATED OF SHEET STEEL NOT LESS THAN NO. 16 U.S. GAUGE WITH THE LEADING EDGE HEMMED. EACH DAMPER TO BE SIZED ADEQUATELY TO COVER THE SMALLER OF THE TWO OPENINGS IT CONTROLS. DAMPERS SHALL BE CONTROLLED AS FOLLOWS:

1. EXPOSED OR ACCESSIBLE DUCTWORK — LOCKING QUADRANTS EQUAL TO YOUNG REGULATOR NO. 1 WITH DAMPER ROD END BEARINGS ON OPPOSITE

2. CONCEALED DUCTWORK — LOCKING QUADRANT EQUAL TO YOUNG REGULATOR NO. 315 (CHROMIUM PLATED WITH DAMPER ROD END BEARINGS ON BOTH ENDS).

B. FIELD FABRICATED TURNING VANES SHALL BE ACCEPTABLE IN SQUARE ELBOWS. PROVIDE AND INSTALL BARBER-COLMAN AIRTURNS OR EQUAL. TURNING VANES SHALL BE OF THE SAME GAUGE METAL AS THE DUCT IN WHICH THEY ARE INSTALLED. RADIUS ELBOWS SHALL HAVE A CENTER LINE RADIUS OF ONE AND ONE-HALF (1-1/2) TIMES THE DUCT WIDTH.

C. VOLUME DAMPERS SHALL BE OF THE OPPOSED INTERLOCKING TYPE AS MANUFACTURED BY AMERICAN FOUNDRY AND FURNACES CO. (AFFCO) OR EQUAL. BLADES SHALL BE OF NO. 16 GAUGE SHEET METAL AND SHALL NOT EXCEED 48" IN LENGTH OR 12" IN WIDTH. BLADES SHALL BE ON ONE-HALF INCH (1/2") DIAMETER RUSTPROOF AXLE. BEARINGS TO BE OF THE SELF-LUBRICATING FERRULE TYPE.

D. FIRE DAMPERS (WHEN REQUIRED) SHALL BE SUPPLIED AND INSTALLED BY HVAC CONTRACTOR AT DUCT PENETRATIONS IN FIRE RATED WALLS. FLOORS, CEILINGS AND ROOF AS REQUIRED. COORDINATE WITH LANDLORD, LOCAL FIRE MARSHALL AND ALL CODES AND GOVERNING AUTHORITIES HAVING JURISDICTION. 1. RECTANGULAR FIRE DAMPERS: RUSKIN MODEL DIBD20 STYLE B CURTAIN TYPE DYNAMIC FIRE DAMPER, OR APPROVED EQUAL. DAMPER SHALL BE B WITH

DAMPER OUT OF AIR STREAM IN OPEN POSITION. 165 DEGREE FUSIBLE LINK

AND 12" SLEEVE. 2. ROUND FIRE DAMPERS: RUSKIN MODEL DIBD20 STYLE CR CURTAIN TYPE DYNAMIC FIRE DAMPER, OR APPROVED EQUAL. DAMPER SHALL BE CR WITH DAMPER OUT OF AIR STREAM IN OPEN POSITION. 165 DEGREE FUSIBLE LINK

A. CONTRACTOR SHALL PROVIDE WATER TIGHT 24 GA. SHEET METAL FLASHINGS AT

ALL EXTERIOR WALLS AND ROOF PENETRATIONS. THE FILTERS ARE IN FRAME HOLDERS, HOLDERS SHALL BE PROVIDED WITH A B. ALL CUTTING OF ROOF OPENINGS, SUPPORTS FOR ROOF OPENINGS, PITCH PANS, ROOF CURBS, FLASHINGS, COUNTER FLASHINGS, REPAIR TO ROOF, ETC. ASSOCIATED WITH HVAC SUBCONTRACTOR SHALL BE INCLUDED IN THE RESPONSIBILITY OF THE HVAC SUBCONTRACTOR. HE SHALL EMPLOY THE LANDLORD'S ROOFERS FOR THIS WORK TO MAINTAIN THE ROOF WARRANTY.

GAS PIPING: EXISTING GAS PIPING TO REMAIN.

AND 12" SLEEVE.

A. GAS PIPING ABOVE GROUND: ASTM A53. SCHEDULE 40 BLACK STEEL WITH SCREWED JOINTS. WHEN GAS PIPING IS RUN IN THE INTERIOR OF A BUILDING

JOINTS ARE TO BE WELDED. FITTINGS SHALL BE BLACK STEEL. B. PROVIDE PRESSURE REDUCING VALVES AS NECESSARY TO REDUCE PRESSURE TO EQUIPMENT NAMEPLATE CAPACITIES PRIOR TO CONNECTION.

C. GAS PIPING SHALL BE IN ACCORDANCE WITH PLUMBING CODES, MECHANICAL CODES, THE INTERNATIONAL FUEL GAS CODE, AND LOCAL PLUMBING

D. ALL GAS PIPING SHALL BE TESTED AND INSPECTED FOR LEAKS IN ACCORDANCE WITH THE INTERNATIONAL FUEL GAS CODE SECTION 406.

E. ALL GAS PIPING ON ROOF TO BE PAINTED WITH 2 COATS OF YELLOW, RUST INHIBITIVE PAINT OR PER LANDLORD'S CRITERIA.

ALL MANUAL DAMPERS, FIRE DAMPERS, TURNING VANES, REGISTER CONNECTIONS, ACCESS DOORS OR OTHER ASSOCIATED ACCESSORIES SHALL BE INSTALLED ACCORDING TO THE LATEST EDITION OF "SMACNA" MANUAL.

TEST AND BALANCE REPORT MUST BE COMPLETED BY AN INDEPENDENT CONTRACTOR THAT IS LICENSED AND CERTIFED BY NEBB, AABC, OR TABB.

B. CONTRACTOR SHALL DEMONSTRATE OPERATION OF SYSTEM TO FULL SATISFACTION OF TENANT, SHALL BALANCE AIR FLOW IN ACCORDANCE WITH AIR QUANTITIES ON DRAWINGS AND SHALL RECORD VOLUME READINGS IN ACCORDANCE WITH ASHRAE AND PROVIDE SAME TO TENANT.

. OPERATION AND MAINTENANCE DOCUMENTATION MUST BE PROVIDED TO THE OWNER THAT INCLUDES AT LEAST THE FOLLOWING INFORMATION: MOUNTED SO THAT THE HIGHEST OPERABLE CONTROL IS NOT MORE THAN 48" 1. EQUIPMENT CAPACITY (INPUT AND OUTPUT) INCLUSIVE OF ENTERING AND LEAVING TEMPERATURES OF BOTH COIL AND UNIT AND REQUIRED MAINTENANCE ACTIONS.

2. EQUIPMENT OPERATION AND MAINTENANCE MANUALS. 3. HVAC SYSTEM CONTROL MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS: DESIRED OR FIELD-DETERMINED SET POINTS MUST BE PERMANENTLY RECORDED ON CONTROL DRAWINGS, AT CONTROL DEVICES, OR, FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS.

4. COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE 5. PROVIDE COMPLETE DATA INDICATING SYSTEM AIR BALANCE IN THE DEMISED

DAYS AFTER OPENING. D. ALL PIPING SHALL WITHSTAND AIR PRESSURE TESTING PER GOVERNING PLUMBING CODE.

SPACE AND A CERTIFIED THIRD PARTY BALANCE REPORT NO MORE THAN 10

ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL AND ACCEPTANCE BY TENANT SHALL BE A CONDITION OF THIS CONTRACT. ALL WORK FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED BY THIS SUBCONTRACTOR WITHOUT ADDITIONAL COST TO THE TENANT.

FIRE PROTECTION SPRINKLER DESIGN CRITERIA
FIRE PROTECTION CONTRACTOR SHALL BE A LICENSED SPRINKLER CONTRACTOR EMPLOYED BY GENERAL CONTRACTOR OR THE LANDLORD'S SPRINKLER CONTRACTOR EMPLOYED BY THE GENERAL CONTRACTOR. SCOPE OF WORK INCLUDES EXISTING SPRINKLER SYSTEM WITH MINOR MODIFICATIONS FOR NEW WALLS AND CEILINGS. NEW SYSTEM SHALL BE A COMPLETE WET PIPE SYSTEM HYDRAULICALLY CALCULATED TO MEET FOLLOWING CRITERIA: A. SPRINKLER SYSTEM:

1. LIGHT HAZARD OCCUPANCY: OFFICES, RESTROOMS, CORRIDORS, DENSITY .10 GPM PER SQ. FT. OVER MOST HYDRAULICALLY REMOTE 1500 SQ. FT., MAXIMUM COVERAGE PER SPRINKLER HEAD 225 SQ. FT.

ORDINARY 2 HAZARD OCCUPANCY: RETAIL SALES AREA AND STORAGE ROOMS. DENSITY .20 GPM PER SQ. FT. OVER MOST HYDRAULICALLY REMOTE 1500 SQ. FT. MAXIMUM COVERAGE PER SPRINKLER HEAD 130 SQ. FT.

3. HYDRAULIC CALCULATIONS SHALL BE BROUGHT BACK TO CONNECTION TO EXISTING FIRE PROTECTION SYSTEM.

4. NEW SPRINKLER HEADS SHALL BE APPROVED STANDARD TYPES, PENDANT AND UPRIGHT, AND DESIGNED FOR ORDINARY HAZARD COVERAGE. CHROME PLATED "GRINNELL", "VIKING", "STAR" OR EQUAL. SPRINKLER HEAD TYPES SHALL BE AS FOLLOWS:

a. GYPSUM BOARD CEILINGS IN SALES AND STOREFRONT: CONCEALED, CAP TO BE BLACK

b. PUBLIC AREAS WITH OPEN TO DECK CEILINGS: EXISTING UPRIGHT c. STOCK AREAS OPEN TO DECK: EXISTING UPRIGHT d. MANAGER'S OFFICE, RESTROOMS, LAY-IN TILE CEILINGS: NEW SEMI

RECESSED, ESCUTCHEON CUP TO MATCH CEILING COLOR e. WHEN EXISTING HEADS ARE IN PLACE, NEW HEADS IN SAME AREA/ CEILING TO MATCH.

NOTE FOR GENERAL CONTRACTOR: IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES AND SPECIFICATIONS LISTED ON THIS SHEET AS THEY MAY PERTAIN TO THE SPECIFIC JOB.

SEQUENCE OF OPERATION FAN CONTROL: THE SUPPLY FAN IS TO RUN CONTINUOUSLY DURING THE OCCUPIED MODE AND WILL CYCLE ON AND OFF DURING THE UNOCCUPIED MODE BASED ON A CALL FOR HEATING OR COOLING.

THERMOSTAT: THE ADJUSTABLE ROOM THERMOSTAT WITH AUTOMATIC HEATING/ COOLING CHANGEOVER SHALL CONTROL THE SPACE TEMPERATURE BASED ON SET POINT VIA INPUT FROM REMOTE SENSOR. THE CONTROL OF THE OCCUPIED/ UNOCCUPIED SETBACK MODE SHALL BE THROUGH THE PROGRAMMABLE FUNCTION OF THE THE THERMOSTAT.

SAFETIES: THE UNIT SHALL BE TOTALLY DISABLED WHEN THE DUCT MOUNTED SMOKE DETECTOR IS ACTIVATED. PROVIDE REMOTE TEST STATION/ ALARM WHEN REQUIRED BY CODE. PROVIDE LANDLORD REQUIRED SEQUENCE OR INTERFACE AS

COOLING CONTROL: UPON A CALL FOR COOLING, THE FIRST STAGE OF COOLING WILL BE ENABLED AND WILL OPERATE UNTIL THE SPACE TEMPERATURE IS SATISFIED. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE THEN THE SECOND STAGE OF COOLING WILL BE ENABLED (IF APPLICABLE).

HEATING CONTROL: UPON A CALL FOR HEATING, THE FIRST STAGE OF HEATING WILL BE ENABLED AND WILL OPERATE UNTIL THE SPACE TEMPERATURE IS SATISFIED. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE THEN THE SECOND STAGE OF HEATING WILL BE ENABLED (IF APPLICABLE).

VENTILATION/ECONOMIZER CONTROL: THE OUTSIDE AIR DAMPER SHALL BE OPEN DURING THE OCCUPIED HEATING AND COOLING MODES FOR CODE REQUIRED MINIMUM OUTSIDE AIR VENTILATION AND SHALL REMAIN CLOSED DURING THE UNOCCUPIED MODE. THE ECONOMIZER MODE IS FIXED ENTHALPY WITH FIXED DRY BULB TEMPERATURE CONTROL AND WILL BE OPERATIONAL WHENEVER COOLING IS REQUIRED AND THE OUTSIDE AIR ENTHALPY IS LESS THAN OR EQUAL TO 28 BTU/LB AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN 75'F AND THE COIL LAT IS ABOVE 45°F.

THE BAROMETRIC RELIEF SHALL OPERATE WHENEVER THE OUTSIDE AIR DAMPER IS OPEN, THE POWER EXHAUST SHALL OPERATE WHENEVER THE ECONOMIZER IS IN

					OUI	SIDE AIR	SCHEDU	ILE				
DESC.	AREA	AREA	AREA	OCCUPANT	OCCUPANCY	OCCUPANT	OCCUPANT	BREATHING	ZONE AIR	ZONE	ZONE	OUTDOOR
	(SQ. FT.)	OUTDOOR	OUTDOOR	LOAD RATE	C x F/1000	OUTDOOR	OUTDOOR	ZONE	DISTRIBUTION	OUTDOOR	OUTDOOR	AIR
		AIR RATE	AIR	PER	(Pz)	AIR RATE	AIR	OUTDOOR	EFFECTIVENESS	AIR	AIR	FRACTION
		PER	(RaAz)	TABLE		PER	(RpPz)	AIR	(Ez)	(Voz =	PROVIDED	(Zp =1- Voz/Vp
		TABLE		403.3.1.1		TABLE		(Vbz = RpPz		Vbz/Ez)		+Voz/Vpz)
		403.3.1.1		(PEOPLE/1000		403.3.1.1		+ RaAz)				SINGLE ZONE
		(RA)		SQ.FT.)		(Rp)						SYSTEM
SALES	11184	0.12	1342.1	15	167.8	7.5	1260.0	2602.1	0.8	3253	3255	
STOCK RM	865	0.12	103.8		0.0		0.0	103.8	0.8	130	130	
HALL	228	0.06	13.7		0.0		0.0	13.7	0.8	18	20	
MGR OFFICE	70	0.06	4.2	5	0.4	5	1.8	6.0	0.8	8	10	
TOTALS	12347									3409	3415	
		•	•									Fv

TOTAL OUTDOOR AIR PROVIDED BY HVAC UNITS

OTAL REQUIRED OUTDOOR AIR

ALCULATIONS BASED ON 2018 WAMO

OTE: TOILET ROOM AND JAN ROOM SQ. FT. NOT INCLUDED

	DE	SIGN COOL	NG		ESIGN HEATING					
	COOLING DATA	AT Jul 1500		HEATING DATA	AT DES HTG					
	COOLING OA DE	B / WB 86.0	°F / 65.0 °F	HEATING OA D	HEATING OA DB / WB 18.0 °F / 14.8 °F					
		Sensib	e Later	t	Sensible	Laten				
ZONE LOADS	Details	(BTU/h	r) (BTU/hı) Details	(BTU/hr)	(BTU/hr				
Window & Skylight Solar Loads	403 ft ²	2502	1	- 403 ft ²	-					
Wall Transmission	3716 ft ²	345	9	- 3716 ft ²	21020					
Roof Transmission	12620 ft ²	5198	0	- 12620 ft ²	78656					
Window Transmission	403 ft ²	397	1	- 403 ft ²	23023					
Skylight Transmission	0 ft ²		0	- 0 ft ²	0					
Door Loads	189 ft ²	50	9	- 189 ft ²	2948					
Floor Transmission	12620 ft ²		0	- 12620 ft ²	6966					
Partitions	272 ft ²	50	5	- 272 ft ²	882					
Ceiling	0 ft ²		0	- 0 ft ²	0					
Overhead Lighting	18964 W	5755	0	- 0	0					
Task Lighting	0 W		0	- 0	0					
Electric Equipment	3851 W	1199	3	- 0	0					
People	175	3702	1 4726	7 0	0	(
Infiltration	-		0	-	0	(
Miscellaneous	-	830	0	-	0					
Safety Factor	10% / 10%	2003	1 472	7 10%	13350	(
>> Total Zone Loads	-	22033	8 5199	-	146846					
Zone Conditioning	-	22837	8 5199	-	148125					
Plenum Wall Load	0%		0	- 0	0					
Plenum Roof Load	0%		0	- 0	0					
Plenum Lighting Load	0%		0	- 0	0					
Return Fan Load	13000 CFM		0	- 13000 CFM	0					
Ventilation Load	3415 CFM	3924	2 -3346	1 3415 CFM	187796	(
Supply Fan Load	13000 CFM	975	8	- 13000 CFM	-9758					
Space Fan Coil Fans	-		0		0					
Duct Heat Gain / Loss	0%		0	- 0%	0					
>> Total System Loads	_	27737	8 1853		326164					
Central Cooling Coil	-	27737			0					
Central Heating Coil	-		0		326164					
>> Total Conditioning	_	27737	8 1853	7 -	326164					
Key:	Positive	values are		1	e values are htg	loads				
		e values are	Negative values are clg loads							

City Name	Puyallup
Location	Washington
Latitude	
Longitude	122.3 Deg.
Elevation	-
Summer Design Dry-Bulb	
Summer Coincident Wet-Bulb	
Summer Daily Range	
Winter Design Dry-Bulb	
Winter Design Wet-Bulb	
Atmospheric Clearness Number	
Average Ground Reflectance	
Soil Conductivity	
Local Time Zone (GMT +/- N hours)	
Consider Daylight Savings Time	
Simulation Weather Data	
Current Data is	

PLAN MARK	QTY.	*TITUS MODEL NO.	FACE SIZE	NECK SIZE	FLEX SIZE	TYPE	NOTES
Α	2	*AES MODEL ADB-1-15-2B	58"×58"	38"x38"	N/A	DIFF.	1, 5, 15" HIGH
В	3	US301FS	10"×4"	N/A	N/A	DIFF.	1
С	1	TMS	24"×24"	8" ø	8" ø	DIFF.	2, 6
D	1	TMS	12"×12"	8" ø	8" ø	DIFF.	2, 4
F	2	TMS	12"x12"	6" ø	6" ø	DIFF.	2, 4
G	1	350RL	12"×12"	10"x10"	N/A	T.G.	3
Н	1	350RL	24"x12"	10"x10"	N/A	R.G.	6
J	2	350RL	26"X12"	24"×10"	N/A	T.G.	3

NOTES:

* OR APPROVED EQUAL

. DUCT MOUNTED PROVIDE & INSTALL MANUAL VOLUME DAMPER

WALL MOUNTED, PAINT TO MATCH WALL 4. PROVIDE TITUS TRM TRIM FRAME FOR MOUNTING IN GYP BOARD CEILING ALLOWING USE AS

ACCESS PANEL CONCENTRIC DIFFUSER. 00 DEFLECTION. MOUNT BOTTOM @ 13'-6" A.F.F.. SUSPEND WITH ALL

THREAD FROM ALL 4 CORNERS. PROVIDE TITUS FRAME TO FIT TILE CEILING.

	EXISTING ROOFTOP UNIT SCHEDULE (E)RTU-1															
MFR.	MODEL	NO	UNIT	W/T	UNIT	VOLTS	S HZ	PH	М	CA			TOTAL		FILTERS	
IVII IX.	WODEL	110.	OIVII	** 1 .	SIZE	VOLIS	7 112	' ' '		· .	AIR	CFM	CFM	NO.	SIZE	TYPE
LENNOX	LGH210H4	4MH3G	254 LB:		17.5 TONS	1 161	60	3	44	4.0	18	40	7000	6	24x24x2	T/A
COOLING	COIL		•					/1551		GA	AS HEA	Т		TE%	, EVAPO	RATO
TOTAL	SENSIBLE	EDB/	EWB	SIZ	Έ	ROWS	LLIN	EER/IEER		11	NPUT OUTPUT		STAGES		° FAN M	IOTOR
201.77 MBH	165.10 MBH	78.1/	64.6	21 SQ.	.4 FT.	4	12.0	/14.	0		0/312 MBH	384/250 MBH	2	80	5.0 HP	MSA\
ACCESSO	RIES:										·			s/	N: 5616F	1029

EXISTING TO REMAIN INCLUSIVE OF HINGED DOORS, ECONOMIZER WITH POWER EXHAUST, RETURN AIR SMOKE DETECTOR, PHASE MONITOR, GFCI OUTLET, DISCONNECT, AND MSAV BLOWER BYPASS. FIELD

PROVIDE 2 SETS OF MERV13 FILTERS, USE 1 AFTER CONSTRUCTION AND PRIOR TO OCCUPANCY, LEAVE THE 2ND SET FOR OWNER WITH RECOMMENDED REPLACEMENT SCHEDULE.

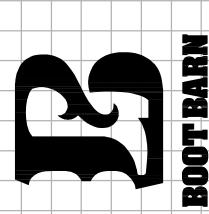
	EXISTING ROOFTOP UNIT SCHEDULE (E)RTU-2														
MFR.	MODEL	NO	UNIT	\\/T	UNIT	VOLT:	SHZ	РН	МСА	MIN. (OUTSIDE	TOTAL		FILTERS	
IVII IX.	WIODEL	110.	ONIT	٧٧١.	SIZE	VOLI	3 172	ГП	IVIOI	AIR	CFM	CFM	NO.	SIZE	TYP
LENNOX	LGH180H4	4MH3G	241 LBS		15 TONS	460	60	3	39.0	15	575	6000	6	24x24x2	T/A
COOLING	COIL		'	'			EER,	/1551	, G	SAS HEA	AT		TE%	EVAPO	RATO
TOTAL	SENSIBLE	EDB/	EWB	SIZ	E f	ROWS	EER,	/	`	INPUT	OUTPUT	STAGES	S	° FAN M	IOTO
175.87 MBH	141.22 MBH	78.1/	64.6	21 SQ.		3	12.0,	/13.	7 48	30/312 MBH	384/250 MBH	2	80	3.0 HP	MSA

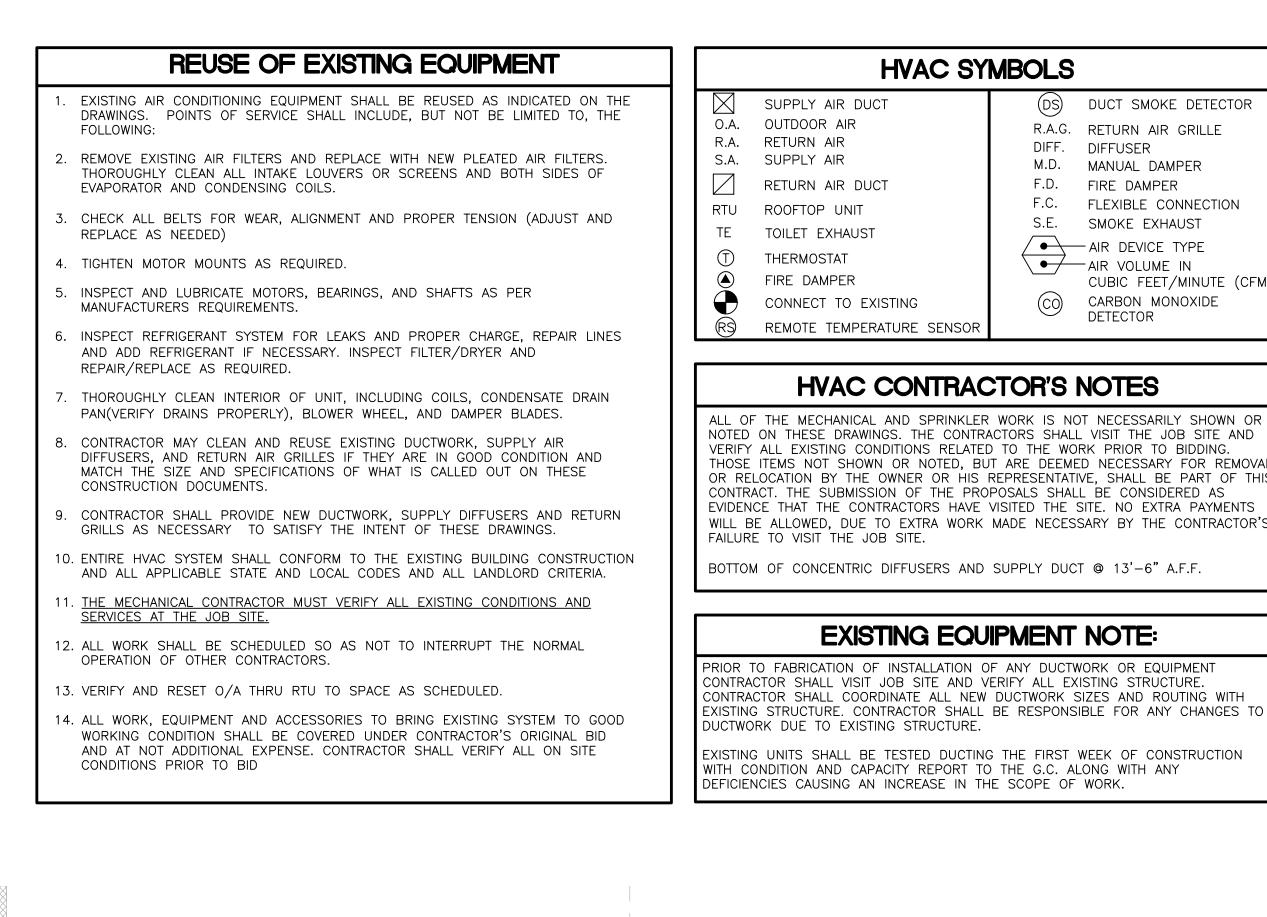
PROVIDE 2 SETS OF MERV13 FILTERS, USE 1 AFTER CONSTRUCTION AND PRIOR TO OCCUPANCY, LEAVE THE 2ND SET FOR OWNER WITH RECOMMENDED REPLACEMENT SCHEDULE.

EXISTING TO REMAIN INCLUSIVE OF HINGED DOORS, ECONOMIZER WITH POWER EXHAUST, RETURN AIR SMOKE DETECTOR, PHASE MONITOR, GFCI OUTLET, DISCONNECT, AND MSAV BLOWER BYPASS. FIELD

City of Puyallup elopment & Permitting Services **ISSUED PERMI** Planning

Public Works Traffic





HVAC SY	MBOLS	
SUPPLY AIR DUCT OUTDOOR AIR RETURN AIR SUPPLY AIR RETURN AIR DUCT ROOFTOP UNIT TOILET EXHAUST THERMOSTAT FIRE DAMPER CONNECT TO EXISTING REMOTE TEMPERATURE SENSOR	R.A.G. DIFF. M.D. F.D. F.C. S.E.	DUCT SMOKE DETECTOR RETURN AIR GRILLE DIFFUSER MANUAL DAMPER FIRE DAMPER FLEXIBLE CONNECTION SMOKE EXHAUST AIR DEVICE TYPE AIR VOLUME IN CUBIC FEET/MINUTE (CFM) CARBON MONOXIDE DETECTOR
	•	
HVAC CONTRAC	CTOR'S	NOTES
OF THE MECHANICAL AND SPRINKLER OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE SUBMISSION OF THE PRONCE THAT THE CONTRACTORS HAVE BE ALLOWED, DUE TO EXTRA WORK OF THE JOB SITE.	ACTORS SHALL O TO THE WO JT ARE DEEME REPRESENTATI POSALS SHAL VISITED THE S MADE NECES:	L VISIT THE JOB SITE AND RK PRIOR TO BIDDING. ED NECESSARY FOR REMOVALIVE, SHALL BE PART OF THIS LEE CONSIDERED AS SITE. NO EXTRA PAYMENTS SARY BY THE CONTRACTOR'S

DAMPER CUBIC FEET/MINUTE (CFM)	REQUIRED FOR BALANCING (TYPICAL).	GRILLE WITH OPENINGS FACING UP ON SIDE(S) OF WALL WITH GYP. BD
NECT TO EXISTING OTE TEMPERATURE SENSOR CO CARBON MONOXIDE DETECTOR	NEW HONEYWELL COMMERCIAL PRO PROGRAMMABLE THERMOSTAT WITH REMOTE SENSOR SUPPLIED AND INSTALLED BY HVAC CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTOR. MOUNTING HEIGHT 4'-0" AFF. REFER TO SHEET MOO. REFER TO ARCHITECTURAL FIXTURE PLAN PRIOR TO	DECK. (13) ENSURE TOILET ROOM/JANITOR CLOSET ROOM DOOR TO BE UNDERCUT TO FACILITATE AIR FLOW. COORDINATE WITH GENERAL CONTRACTOR.
HVAC CONTRACTOR'S NOTES	LOCATING REMOTE SENSORS.	(14) EXISTING SPRINKLER MAIN. FIELD VERIFY EXACT SIZE AND LOCATION.
MECHANICAL AND SPRINKLER WORK IS NOT NECESSARILY SHOWN OR	(6) EXISTING ROOFTOP UNIT TO REMAIN. SEE REUSE OF EQUIPMENT NOTES AND SCHEDULE ON SHEET MOO FOR MORE INFORMATION.	(15) EXISTING UPRIGHT SPRINKLER HEAD (TYPICAL). FIELD VERIFY EXACT LOCATION.
HESE DRAWINGS. THE CONTRACTORS SHALL VISIT THE JOB SITE AND EXISTING CONDITIONS RELATED TO THE WORK PRIOR TO BIDDING. NOT SHOWN OR NOTED, BUT ARE DEEMED NECESSARY FOR REMOVAL ON BY THE OWNER OR HIS REPRESENTATIVE, SHALL BE PART OF THIS	(7) EXISTING CONDENSATE DRAIN TO BE INSPECTED. ENSURE 4" MIN P-TRAP WITH VENT AND CLEANOUT. TERMINATION WITH AIR GAP ONTO ROOF, VERIFY WALK PAD UNDER DISCHARGE.	NEW UPRIGHT SPRINKLER HEAD (TYPICAL). COORDINATE EXACT LOCATION WITH NEW WALLS. MODIFY SUPPLY PIPING AS REQUIRED.
HE SUBMISSION OF THE PROPOSALS SHALL BE CONSIDERED AS AT THE CONTRACTORS HAVE VISITED THE SITE. NO EXTRA PAYMENTS	(8) EXISTING RETURN AIR DUCT SMOKE DETECTION DEVICE ACCESSED FROM UNIT TO REMAIN. SMOKE DETECTION DEVICE IS TO BE INTERLOCKED WITH	(17) EXISTING SPRINKLER HEAD IN LOW CEILING TO REMAIN (TYPICAL). SPRII CONTRACTOR TO INSPECT AND REPLACE AS REQUIRED.
OWED, DUE TO EXTRA WORK MADE NECESSARY BY THE CONTRACTOR'S VISIT THE JOB SITE. CONCENTRIC DIFFUSERS AND SUPPLY DUCT @ 13'-6" A.F.F.	ROOFTOP UNIT TO SHUT THE UNIT DOWN UPON THE DETECTION OF SMOKE. SMOKE DETECTOR SHALL BE WIRED INTO THE BUILDING FACP. COORDINATE WITH ELECTRICAL CONTRACTOR. REPLACE IF REQUIRED.	NEW SPRINKLER HEAD IN LOW CEILING. COORDINATE EXACT LOCATION VINEW CEILING FIXTURES, LIGHTS, AND WALLS. MODIFY SUPPLY PIPING AS REQUIRED. SEE SPECIFICATIONS FOR HEAD TYPE.
	9 HVAC CONTRACTOR TO SUPPLY AND INSTALL A LINED RETURN DROP FROM ROOFTOP UNIT WITH WIRE MESH SCREENED SIDE OPENING OF SIZE INDICATED ON PLAN. EXISTING RISER MAY BE REUSED IF LINED AND IN	$\langle 19 \rangle$ existing gas connection to RTU by HVAC contractor, ensure PR
EXISTING EQUIPMENT NOTE:	GOOD CONDITION, ADD SCREENED OPENING(S) AND CAP BOTTOM. SEE DETAIL SHEET M2.0.	DIDTLEC LINION CHUTCE DECLINATOR AND ELEV CONNECTOR AS DEC

ROOFTOP UNIT WITH WIRE MESH SCREENED SIDE OPENING OF SIZE INDICATED ON PLAN. EXISTING RISER MAY BE REUSED IF LINED AND IN GOOD CONDITION, ADD SCREENED OPENING(S) AND CAP BOTTOM. SEE DETAIL SHEET M2.0.	\bigcup	EXISTING GAS CONNECTION TO RTU BY HVAC CONTRACTOR. ENSURE PROPER DIRTLEG, UNION, SHUTOFF, REGULATOR, AND FLEX CONNECTOR AS REQUIRED BY CODE.
PROVIDE NEW EXHAUST FAN: BROAN MODEL #AE110 SERIES TOILET EXHAUST FAN, 110 CFM @ 0.1 SP, 120/1/60, 0.3 AMPS(23.4 W), 4.7 EFFICACY, 6"	20	EXISTING GAS METER ON EXTERIOR WALL AND GAS SUPPLY LINE RUN ABOVE ROOF DECK TO REMAIN. FIELD VERIFY EXACT LOCATION.
DIA. EXHAUST DUCT. COORDINATE WITH ELECTRICAL CONTRACTOR. EXHAUST FAN TO BE WIRED TO OPERATE WITH LIGHT SWITCH. ROUTE NEW 10"Ø	21>	NEW FIRE EXTINGUISHER PROVIDED BY GENERAL CONTRACTOR, SEE SHEET A10, SHOWN FOR REFERENCE ONLY.
EXHAUST DUCT THRU ROOF. PROVIDE CAP AND CURB WITH LOW LEAK BACKDRAFT DAMPER. SEE DETAIL SHEET M2.0.	22	GENERAL CONTRACTOR TO LABEL ALL RTUS, THERMOSTATS, REMOTE SENSORS, AND DUCT SMOKE DETECTOR ANNUNCIATORS (WHEN USED).

1 NEW SUPPLY AIR DUCT INSTALLED BY HVAC CONTRACTOR. PROVIDE

(2) DUCTWORK IN CONDITIONED AREAS DOES NOT REQUIRE INSULATION.

POSSIBLE/PRACTICAL IN JOIST SPACE.

INTERNAL AIR PATH DIMENSIONS, HOLD ALL DUCTWORK AS HIGH AS

NEW SUPPLY AIR DUCT IN UNCONDITIONED CEILING AREA EXTERNALLY

INSULATED (MIN. R-4.2) SUPPLIED AND INSTALLED BY HVAC CONTRACTOR.

4) PROVIDE MANUAL VOLUME DAMPER AT ALL DIFFUSER CONNECTIONS AND AS

TRANSITIONS, SUPPORTS, ETC. AS REQUIRED, DUCT DIMENSIONS ARE CLEAR

HVAC + SPRINKLER KEYED NOTES -23 EXISTING FACP, SHOWN FOR REFERENCE, FIELD VERIFY EXACT LOCATION, (11) PROVIDE NEW JANITOR'S CLOSET EXHAUST FAN: PANASONIC MODEL #FV-0510VS1 SERIES VENTILATION FAN MOUNTED IN SIDEWALL @ 9'-6" CONNECT NEW DUCT SMOKE DETECTORS, SEE NOTE 8. A.F.F., 81 CFM @ 0.25 SP, 120/1/60, 0.2 AMPS(11.5 W), 7.2 EFFICACY, (24) NEW ROUND CONTROL DAMPER WITH THERMOSTATIC CONTROL, PROVIDE IN PROVIDE 4"Ø DUCT ROUTED TO TOILET EXHAUST OUTLET DUCT, SEE NOTE 10. COORDINATE WITH ELECTRICAL CONTRACTOR AND G.C. EXHAUST FAN TO BE WIRED FOR CONTINUOUS OPERATION DURING OCCUPIED HOURS.

(12) NEW TRANSFER AIR GRILLE SUPPLIED AND INSTALLED BY MECHANICAL

CONTRACTOR. INSTALL AS HIGH AS POSSIBLE/PRACTICAL IN WALL.

LOCATION SHOWN (COORDINATE TSTAT LOCATION WITH G.C. AND P.M.) DAMPER AND CONTROL TO BE 24V POWERED FROM RTU EQUAL TO ZONEX STMPD14 WITH SAMOD THERMOSTAT. (25) EXISTING LENNOX GAS UNIT HEATER MODEL LF24 WITH 4" FLUE THROUGH

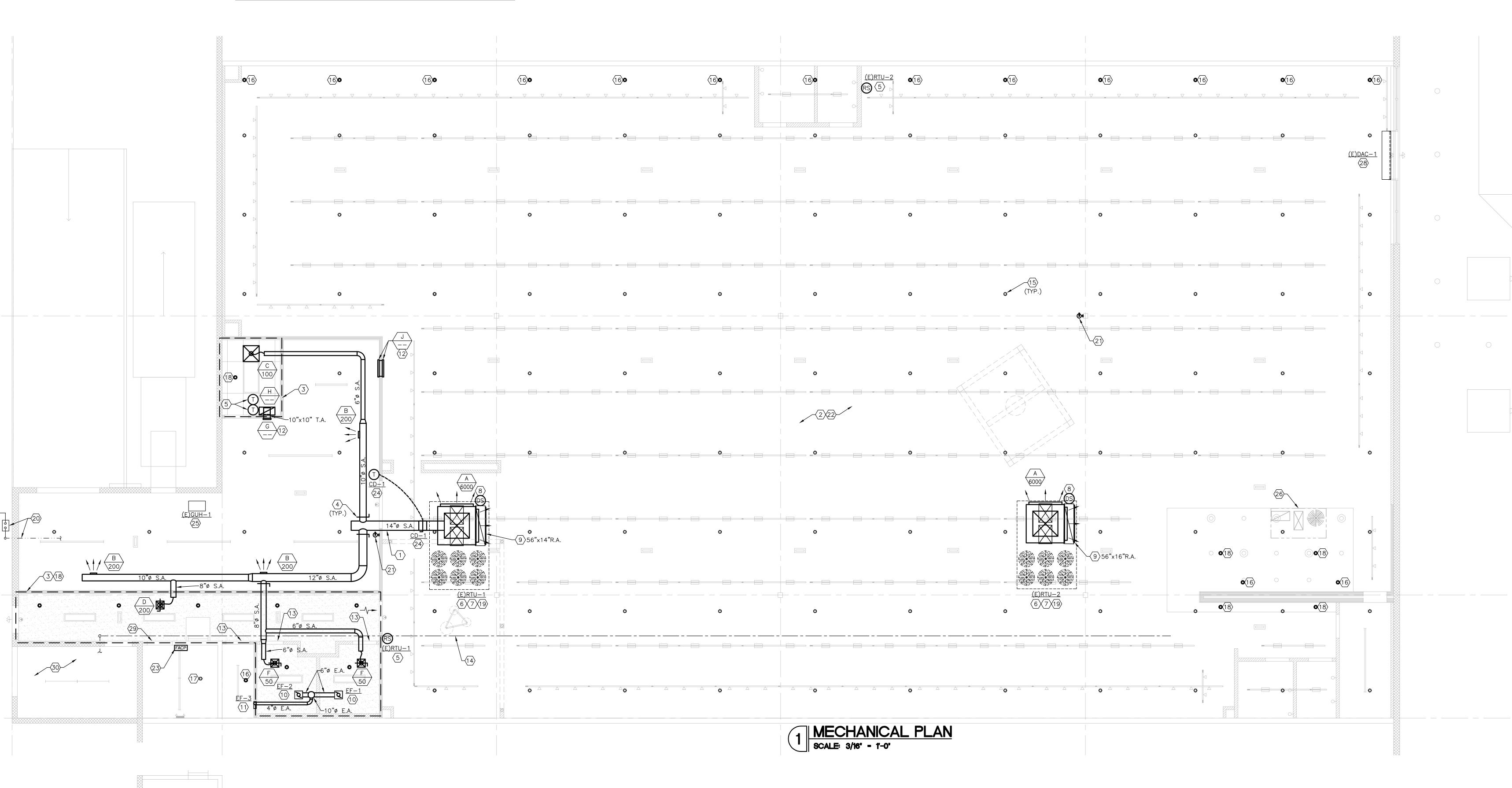
ROOF TO REMAIN. COMBUSTION AIR FROM INSIDE SPACE, MAX BTUH OF COORDINATE WITH GENERAL CONTRACTOR. PAINT GRILLE FACE TO MATCH 145,000 REQUIRING 50 CU. FT. PER 1,000 BTUH OR 7,250 CU. FT, STOCK ADJACENT SURFACE. REFER TO AIR DEVICE SCHEDULE FOR SIZES. INSTALL ROOM VOLUME IS @ 19,000 CU. FT. FIELD VERIFY MAKE, MODEL, AND GRILLE WITH OPENINGS FACING UP ON SIDE(S) OF WALL WITH GYP. BD. TO EXACT LOCATION. CLEAN AND REPAIR AS REQUIRED.

13 ENSURE TOILET ROOM/JANITOR CLOSET ROOM DOOR TO BE UNDERCUT 3/4" (26) EXISTING ROOFTOP UNIT TO BE ABANDONED. SHUT OFF AND LOCK UTILITIES AS REQUIRED. CAP DUCT DROPS INSIDE SPACE AIRTIGHT AND INSULATE. 27) EXISTING LADDER AND ROOF HATCH FOR ROOF ACCESS TO REMAIN. SHOWN FOR REFERENCE.

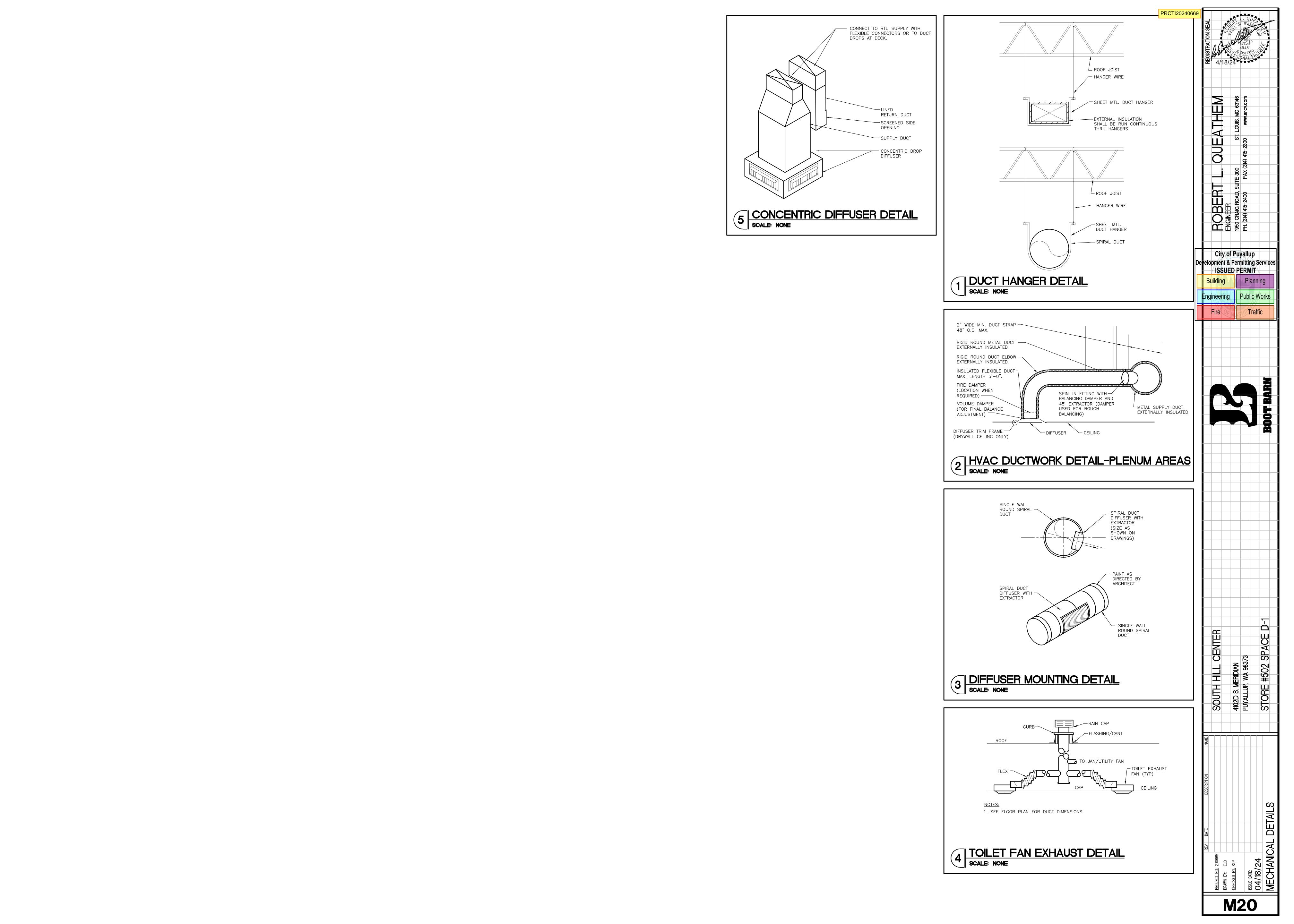
> $\langle 28 \rangle$ EXISTING AIR CURTAIN (POWERED AIRE CED-2-72E, (2) 1/2 HP MOTOR @ 208/1 AND 20 KW HEAT @ 208/3) TO REMAIN. CLEAN AND PROVIDE GENERAL MAINTENANCE. VERIFY CONTROLS ALLOW HEAT OPERATION ONLY WHEN INDOOR TEMPERATURE IS \leq 60°F AND OUTDOOR TEMPERATURE IS \leq 40°F, AND FANS TO OPERATE WITH DOOR OPENING.

(17) EXISTING SPRINKLER HEAD IN LOW CEILING TO REMAIN (TYPICAL). SPRINKLER (29) LOUVERED DOOR ON ELEC. ROOM AND HALF WALL ON ELEC. MEZZANINE ALLOW FOR TRANSFER AIR.

(18) NEW SPRINKLER HEAD IN LOW CEILING. COORDINATE EXACT LOCATION WITH $\overline{30}$ EXISTING SPRINKLER ROOM WITH RISER AND FIRE PUMP TO REMAIN. NEW CEILING FIXTURES, LIGHTS, AND WALLS. MODIFY SUPPLY PIPING AS LOUVERS ON THE 2 EXTERIOR WALLS ALLOW FRESH AIR. SHOWN FOR REFERENCE ONLY.



M10



WATER HEATER SCHEDULE PLUMBING SPECIFICATIONS HANDICAP SPECIFICATIONS: ARCHITECTURAL BARRIERS ACT 42/USC. 4151-4157 | MODEL # | CAPACITY | RECOVERY | WATTS | VOLTS | PHASE | TEMP. RISE |-THE WORK COVERED BY THESE SPECIFICATIONS INCLUDES BUT IS NOT LIMITED TO PROVIDING ALL LABOR, MATERIAL, AND EQUIPMENT WH-1 *A.O. SMITH DEL-6 6-GAL. 8 GPH 1500 120 1 90° F 1500 ----NECESSARY TO COMPLY WITH REQUIREMENTS OF THIS FACILITY. * OR APPROVED EQUAL REFER TO ARCHITECTURAL SHEET A550 FOR ADA REQUIREMENTS AND CLEARANCES OF PLUMBING FIXTURES. NOTE: PROVIDE DRAIN VALVE, T & P RELIEF VALVE, EXPANSION TANK, SEISMIC STRAPS, AND DRAIN PAN. CALCULATIONS BASED ON INCOMING WATER AT 52'F. CAPACITY AND KW ARE EXEMPT FROM PLUMBING FIXTURES ENERGY REQUIREMENTS. . WATER CLOSET (STANDARD) — AS IDENTIFIED ON PLANS — 1/2" C.W. SUPPLY AND 4" VENTED WASTE. WATER HEATER SCHEDULE FORCE REQUIRED TO ACTIVATE FLUSH VALVE LEVER TO BE 5 LBS. MAXIMUM (4.16.5) B. LAVATORY — AS IDENTIFIED ON PLANS WITH FAUCET, 1/2" C.W. AND H.W. SUPPLY AND 1-1/2" VENTED WASTE. MFR. MODEL # | CAPACITY | AMPS | WATTS | VOLTS | PHASE | TEMP. RISE EXPOSED WATER AND DRAIN PIPING BELOW LAVATORY SHALL BE INSULATED WITH "PLUMBEREX" (OR EQUAL) PIPE COVERS. | IWH | EeMAX | SPEX4277 | 0.5 GPM | 15 | 4,100 | 277 | 1 FAUCET CONTROLS SHALL BE OF THE TYPE NOT REQUIRING TIGHT GRASPING, PINCHING, OR TWISTING OF WRIST AND AN OPERATING FORCE UNIT SHALL HAVE REPLACEABLE FILTER INLET AND 0.5 GPM CONSTANT FLOW REGULATOR. DESIGN NOT EXCEEDING 5 LBS. GROUND WATER TEMP. OF 52'F. LEAVING WATER TEMP OF 108'F. CAPACITY AND KW ARE EXEMPT FROM ENERGY REQUIREMENTS. SELF-CLOSING VALVES SHALL BE OF THE TYPE REMAINING OPEN FOR AT LEAST 10 SECONDS. CLEAN-OUTS - SHALL BE AS MANUFACTURED BY JOSAM, ZURN, OR EQUAL, AND SHALL BE INSTALLED AT ALL BENDS, ANGLES, AND ENDS OF ALL WASTE AND SEWER LINES, AS CALLED FOR ON THE DRAWINGS AND AS REQUIRED BY LOCAL CODES. ALL CLEAN-OUTS SHALL BE ADJUSTABLE INSTALLED FLUSH WITH FINISHED FLOOR OR GRADE, AND IN ALL CASES, SHALL BE PROVIDED WITH SUFFICIENT SPACE FOR RODDING.

WATER HEATER — MANUFACTURER AS IDENTIFIED ON PLANS. REFER TO PLUMBING DRAWING TO DETERMINE IF NEW WATER HEATER IS A

MIXING VALVES - EQUAL TO WATTS SERIES LFMMV SINGLE POINT MIXING VALVE, 0.5 GPM MIN. ACTIVATION OR LFG480, 0.35 GPM MIN.

FLOOR DRAIN - AS IDENTIFIED ON PLANS. ADJUSTABLE CAST IRON DRAIN WITH NICKEL-BRONZE ADJUSTABLE STRAINER; INSIDE CAULK.

NOTE: NOTE: OWNER'S GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION OF ALL TOILET ACCESSORIES INCLUDING

SANITARY SEWER - ALL SANITARY PIPING SHALL BE CAST IRON. VENTS TWO INCHES (2") IN SIZE AND SMALLER MAY BE EITHER SCHEDULE 40 GALVANIZED STEEL OR COPPER PIPING. PVC MAY BE USED IF ALLOWED BY LANDLORD AND CODE (NON-RETURN AIR

DOMESTIC WATER AND HOT WATER PIPING TO BE COPPER TYPE "L" INSULATED WITH ARMAFLEX OR EQUIVALENT INSULATING TO A

. PIPING AND FITTINGS SHALL BE OF THE WEIGHTS AND TYPES SHOWN ON DRAWINGS. SIZES SHOWN ON ON DRAWINGS ARE NOMINAL

ALL PIPING SHALL BE INSTALLED PARALLEL WITH, OR AT RIGHT ANGLES TO THE BUILDING WALLS AND PARTITIONS AND SHALL BE

ALL PIPING SHALL BE UPENDED AND POUNDED TO REMOVE ANY FOREIGN MATERIAL PRESENT AND SHALL BE SWABBED IF NECESSARY.

SCREWED PIPE SHALL BE INSTALLED WITH PIPE COMPOUND APPLIED TO THE MALE THREAD WITH NOT MORE THAN TWO THREADS LEFT

HORIZONTAL PIPING SHALL BE SUPPORTED AT INTERVALS NOT TO EXCEED 10'-0" WITH SWIVEL PIPE HANGERS BY ANVIL, NVENT, OR ZSI

MATERIAL COMPATIBLE WITH PIPING MATERIAL. VERTICAL PIPING SHALL BE SUPPORTED BY MEANS OF WROUGHT IRON CLAMPS SUSPENDED

ALL VALVES SHALL BE LEAD FREE BRASS AND MANUFACTURED BY CRANE, NIBCO, STOCKHAM, LUNKENHEIMER, NORDSTROM, GRINNELL OR

CONTRACTOR SHALL DEMONSTRATE OPERATION OF PIPING SYSTEM TO FULL SATISFACTION OF TENANT. ALL PIPING SHALL WITHSTAND AIR

ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE.

CONTRACT. ALL WORK FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED BY THIS SUBCONTRACTOR WITHOUT ADDITIONAL COST

THE COMPLETED PLUMBING SYSTEM SHALL BE FULLY OPERATIONAL AND ACCEPTANCE BY TENANT SHALL BE A CONDITION OF THIS

OUTLET AND CLAMPING DEVICE WHERE REQUIRED. PROVIDE WITH TRAP PRIMER TAP AND TRAP PRIMER WHERE INDICATED.

ACTIVATION (VERIFY REQUIREMENT WITH FIXTURE SCHEDULE), 1/2" LINE SIZE. MIXING VALVE SHALL CONFORM TO ASSE 1017, ASSE

TANK TYPE OR IS OF THE INSTANTANEOUS VARIETY.

SUPPORT BLOCKING INSIDE WALL.

INSTALLED WITH THE PROPER PITCH.

PRESSURE TESTING PER GOVERNING CODES.

EXPOSED. PIPE SHALL BE REAMED AFTER THREADING.

FROM THE UNDERSIDE OF STRUCTURE WITH HANGER RODS.

3. COPPER JOINTS SHALL BE MADE UP WITH 95—5 LOW LEAD SOLDER.

1069 & ASSE 1070.

PLENUM APPLICATIONS).

THICKNESS OF 1".

TESTING AND ADJUSTING

<u>GUARANTEE</u>

THE TENANT.

PLUMBING FIXTURE CALCULATIONS								
PLUMBING FIXTURE	PLUMBING FIXTURE QUANTITY	DRAINAGE FIXTURE UNIT EA.	DRAINAGE FIXT. UNIT TOTAL	VENT SIZE EACH	C.W. FIXTURE UNIT EACH	C.W. FIXTURE UNIT TOTAL		
WATER CLOSET	2	4	8	2"	2.5	5		
LAVATORY	2	1	2	1½"	1	2		
MOP SINK	1	3	3	2"	3	3		
DRINKING FOUNTAIN	1	0.5	0.5	1½"	0.5	0.5		
EMERGENCY FLOOR DRAIN	2	0	0	2"	_	_		
TRAP PRIMER	1				0.5	0.5		
EXIST. HOSE BIB	2				2.5 (+1)	3.5		
	7	TOTALS	13.5	_		14.5		
			SAN.	VENT		C.W.		
SERVICE	CONNECTIO	ON SIZE	4"	4"	-	1"		

FL			INE CAL	JULAIN		
PLUMBING FIXTURE	PLUMBING FIXTURE QUANTITY	DRAINAGE FIXTURE UNIT EA.	DRAINAGE FIXT. UNIT TOTAL	VENT SIZE EACH	C.W. FIXTURE UNIT EACH	C.W. FIXTUF UNIT TOTAL
WATER CLOSET	2	4	8	2"	2.5	5
LAVATORY	2	1	2	1½"	1	2
MOP SINK	1	3	3	2"	3	3
DRINKING FOUNTAIN	1	0.5	0.5	1½"	0.5	0.5
EMERGENCY FLOOR DRAIN	2	0	0	2"	_	_
TRAP PRIMER	1				0.5	0.5
EXIST. HOSE BIB	2				2.5 (+1)	3.5
	-	TOTALS	13.5	_		14.5
			SAN.	VENT		C.W.
SERVICE	CONNECTION	ON SIZE	4"	4"		1"

PLUMBING CONTRACTOR'S NOTES
ALL OF THE PLUMBING/PIPING WORK IS NOT NECESSARILY SHOWN OR NOTED ON THESE DRAWINGS THE CONTRACTORS SHALL VISIT THE JOB SITE AND FIELD VERIFY ALL EXISTING CONDITIONS RELATED TO THE WORK PRIOR TO BIDDING. THOSE ITEMS NOT SHOWN OR NOTED BUT WHICH ARE DEEMED NECESSARY FOR REMOVAL OR RELOCATION BY OWNER OR HIS REPRESENTATIVE SHALL BE PART OF HIS CONTRACT. THE SUBMISSION OF THE PROPOSALS SHALL BE CONSIDERED EVIDENCE THAT THE CONTRACTORS HAVE VISITED THE SITE. NO EXTRA PAYMENTS WILL BE ALLOWED THESE CONTRACTORS
ON ACCOUNT OF EXTRA WORK MADE NECESSARY BY HIS FAILURE TO VISIT THE JOB SITE.

PLUMBING CONTRACTOR TO PROVIDE BACKFLOW PREVENTER DEVICE IF REQUIRED PER CODE AND/OR LANDLORD. COORDINATE WITH BOOTBARN ARCHITECT/ENGINEER PRIOR TO LOCATING BACKFLOW PREVENTER DEVICE.

PLUMBING CONTRACTOR TO PROVIDE WATER METER IF REQUIRED BY CODE/LANDLORD. COORDINATE WITH BOOTBARN'S ARCHITECT/ENGINEER PRIOR TO LOCATING WATER METER. G.C. SHALL PERFORM THE FOLLOWING:

CAMERA SCOPE THE ENTIRE SANITARY SEWER LINE PROVIDING SERVICE TO THIS SPACE AND PROVIDE A DVD OF THE SANITARY SEWER SCOPE AS DOCUMENTATION SUPPORT OF THE FIRST DRAW REQUEST THE FIRST DRAW REQUEST WILL NOT BE PAID WITHOUT IT.

PROVIDE PHOTOGRAPHIC EVIDENCE FROM SEWER LINE TO TOILET ROOMS INCLUDING ALL LINE OUGH-INS AND FITTINGS PRIOR TO POURING CONCRETE SLABS OVER SANITARY LINES OR CLOSING ANY SANITARY DITCHES.

LABEL ALL WATER HEATERS AND THEIR BREAKERS WITH MATCHING DESIGNATIONS E.G. (WH-1) OR

			<u> </u>	<u> </u>					. 2011.511.10. 0111.5020
	FIXTURE DATA				VECTION				——————————————————————————————————————
FIXTURE WATER CLOSET (WC-1)	QTY. MFG. 1 AMERICAN STANDARD	CATALOG NO. 211AA.004	SOIL SIZE 4"	SIZE	TRAP	COLD 1/2"	HOT	"CHAMPION PRO ELONGATED RIGHT HEIGHT ELONGATED TOILET" ADA 16-1/2"H TOILET WITH ALL ASSOCIATED TRIM, FITTINGS AND HARDWARE. LEFT HANDED TRIP LEVER. SEAT SHALL BE WHITE SOLID PLASTIC WITH OPEN FRONT LESS COVER. PROVIDE COMPLETE WITH CHROME SUPPLY AND SERVICE STOP.	
WATER CLOSET	1 AMERICAN STANDARD	211AA.005	4"	2"		1/ "		"CHAMPION PRO ELONGATED RIGHT HEIGHT ELONGATED TOILET" ADA 16-1/2"H	WATER TIEMER
(WC-2)								TOILET WITH ALL ASSOCIATED TRIM, FITTINGS AND HARDWARE. RIGHT HANDED TRIP LEVER. SEAT SHALL BE WHITE SOLID	PLUMBING KEYED NOTES (
								PLASTIC WITH OPEN FRONT LESS COVER. PROVIDE COMPLETE WITH CHROME SUPPLY AND SERVICE STOP.	1) NEW 6 GALLON TANK TYPE WATER LOCATED ON PLATFORM ABOVE MOP SINK. COORDINATE WITH ELECTRICAL CONTRACTOR. REFER TO WATER HEATER SCHEDULE ON THIS SHEET AND DETAIL ON SHEET P20 FOR ADDITIONAL INFORMATION.
LAVATORY (LAV)	2 *AMERICAN STANDARD	0355.012 LUCERNE	1½"	1½"	1 1/2"	1/,"	1/ " /2	"LUCERNE" WALL HUNG LAVATORY WITH FAUCET LEDGE, FAUCET HOSES ON 4" CENTERS, & WALL HANGER. FAUCET SHALL BE MOEN MODEL 8430, CHROME	2) NEW HANDICAPPED WATER CLOSET SUPPLIED AND INSTALLED BY PLUMBING CONTRACTOR. REFER TO SCHEDULE ON THIS SHEET AND RISER DIAGRAMS SHEET P20 FOR ADDITIONAL INFORMATION.
								STOPS, SUPPLIES AND A 1-1/4" WHEELCHAIR LAVATORY DRAIN WITH STAINLESS STEEL GRID AND P-TRAP.	3 NEW HANDICAPPED LAVATORY SUPPLIED AND INSTALLED BY PLUMBING CONTRACTOR. REFER TO SCHEDULE ON THIS SHEET AND RISER DIAGRAMS SHEET P20 FOR ADDITIONAL INFORMATION.
								PROTECT TRAP AND SUPPLIES WITH A TRAP WRAP KIT 500R AS MANUFACTURED BY BROCAR PRODUCTS INC. LAVATORY	4 EXTEND NEW COLD WATER PIPING TO EXISTING COLD WATER PIPING. FIELD VERIFY EXACT LOCATION AND SIZE.
								MOUNTING HEIGHT SHALL BE AS REQUIRED BY THE A.D.A. AND AS DETAILED ON ARCHITECTURAL DRAWINGS.	5 EXTEND AND CONNECT NEW 4" SANITARY PIPING TO EXISTING SANITARY PIPING. FIELD VERIFY EXACT LOCATION, SIZE, AND DIRECTION OF FLOW.
WALL CLEAN OUT	3 J.R. SMITH	9776	SEE RISER						6 PLUMBING CONTRACTOR TO PROVIDE AND INSTALL NEW 4" VENT THRU ROOF. TERMINATION OF VENT THRU ROOF TO BE LOCATED A MINIMUM OF 10 FT DISTANCE FROM ANY FRESH AIR INTAKE. FIELD VERIFY EXISTING CONDITIONS. COORDINATE WITH LANDLORD ON EXACT LOCATION.
FLOOR CLEAN OUT	2 J.R. SMITH	4000 SERIES	SEE RISER					ADJUSTABLE CLEANOUT, IF FLOORS ARE TILED OR TERRAZZO PROVIDE WITH NICKEL BRONZE FINISH, IF FLOORS ARE	7) NEW WALL CLEAN OUT. SEE SCHEDULE ON THIS SHEET, SANITARY RISER DIAGRAM, AND DETAIL ON SHEET P20 FOR ADDITIONAL INFORMATION.
								CARPETED PROVIDE WITH RECESSED TOP. CLEANOUTS ARE TO BE FLUSH WITH FINISHED FLOOR.	8 NEW MOP SINK SUPPLIED AND INSTALLED BY PLUMBING CONTRACTOR. REFER TO SCHEDULE ON THIS SHEET AND RISER DIAGRAMS SHEET P20 FOR ADDITIONAL INFORMATION.
FLOOR DRAIN (F.D.)	2 J.R. SMITH	2005	3"	2"	3"			FURNISH WITH DUCO CAST IRON BODY WITH TRAP PRIMER CONNECTION, SEDIMENT BUCKET, 5" SECURE GRATE,	9 NEW HANDICAPPED DRINKING FOUNTAIN SUPPLIED AND INSTALLED BY PLUMBING CONTRACTOR. REFER TO SCHEDULE ON THIS SHEET, RISER DIAGRAMS ON SHEET P20, AND DETAIL ON SHEET A6.1 FOR ADDITIONAL INFORMATION.
								AND OUTLET AS REQUIRED BY PIPING MATERIAL. ROUND TYPE TOP.	10) NEW 3" FLOOR DRAIN. REFER TO SCHEDULE ON THIS SHEET, SANITARY RISER DIAGRAM, AND DETAIL ON SHEET P20 FOR ADDITIONAL INFORMATION.
TRAP PRIMER	1 *PPP	PR-500				1/,"		PROVIDE WITH DU-2 DISTRIBUTION UNIT.	11) NEW TRAP PRIMER SUPPLIED AND INSTALLED BY PLUMBING CONTRACTOR. REFER TO SCHEDULE ON THIS SHEET AND DETAIL ON SHEET P20 FOR ADDITIONAL INFORMATION.
MOP SINK (M.S.)	1 *FIAT	MSB-2424	3"	2"	3"	1/." /2"	½" 2	830-AA FAUCET, 832-AA HOSE, 889-CC MOP RACK, STAINLESS STEEL WALL GUARDS (2 SIDES)	NEW ADJUSTABLE FLOOR CLEAN OUT. REFER TO SCHEDULE ON THIS SHEET, SANITARY RISER DIAGRAM, AND DETAIL ON SHEET P20 FOR ADDITIONAL INFORMATION.
HI-LOW ELECTRIC	1 *ELKAY	EZSTL8LC	1 1/4"	1 1/4 "	1 1/4 "	3/ " /8		FRONT AND SIDE PUSHBARS ADA COMPLIANT, REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. 5 AMPS @	(13) NEW INSTANTANEOUS WATER HEATER SUPPLIED AND INSTALLED BY PLUMBING CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTOR. REFER TO WATER HEATER SCHEDULE ON THIS SHEET AND DETAIL ON SHEET P20 FOR ADDITIONAL INFORMATION.
DRINKING FOUNTAIN (D.F.)								115/1/60.	14) EXISTING HOSE BID TO REMAIN. FIELD VERIFY EXACT LOCATION. AVOID WITH NEW CONSTRUCTION.
* OR APPR	OVED EQUAL		ı	1	1	ı	ı		15) EXISTING EXTERIOR GRADE CLEAN OUT. FIELD VERIFY EXACT SIZE AND LOCATION.

PLUMBING FIXTURE SCHEDULE

*	OR	APPROVED	EQUAL

PLUMBING SYMBOLS

PATCH FLOOR/WALL BACK TO "LIKE NEW" CONDITION.

REQUIRED. MARK LOCATIONS ON AS-BUILT DRAWINGS.

— SAN.——	SANITARY SEWER LINE	T.P.R.V.	TEMPERATURE PRESSURE RELIEF VALVE
V	VENT LINE	P.O.C.	POINT OF CONNECTION
. – – – – – –	COLD WATER SUPPLY	E.D.F.	ELECTRIC DRINKING FOUNTAIN
	HOT WATER SUPPLY	M.S.	MOP SINK
\longrightarrow	SHUT-OFF VALVE	LAV.	LAVATORY
-	BACKFLOW PREVENTER	W.C.	WATER CLOSET
V.T.R.	VENT THRU ROOF	A.F.F.	ABOVE FINISHED FLOOR
C.I.	CAST IRON	B.F.F.	BELOW FINISHED FLOOR
F.C.O.	FLOOR CLEAN OUT	М	WATER METER
W.C.O.	WALL CLEAN OUT		WATER WEILK
ED	ELOOD DDAIN	(R)	REMOTE READER

(16) EXISTING PLUMBING FIXTURES NOT BEING REUSED ARE TO BE REMOVED. FIELD VERIFY EXACT

7) FIELD VERIFY SIZE AND LOCATION OF WATER SHUT-OFF IN VAULT, WATER METER AND ANY

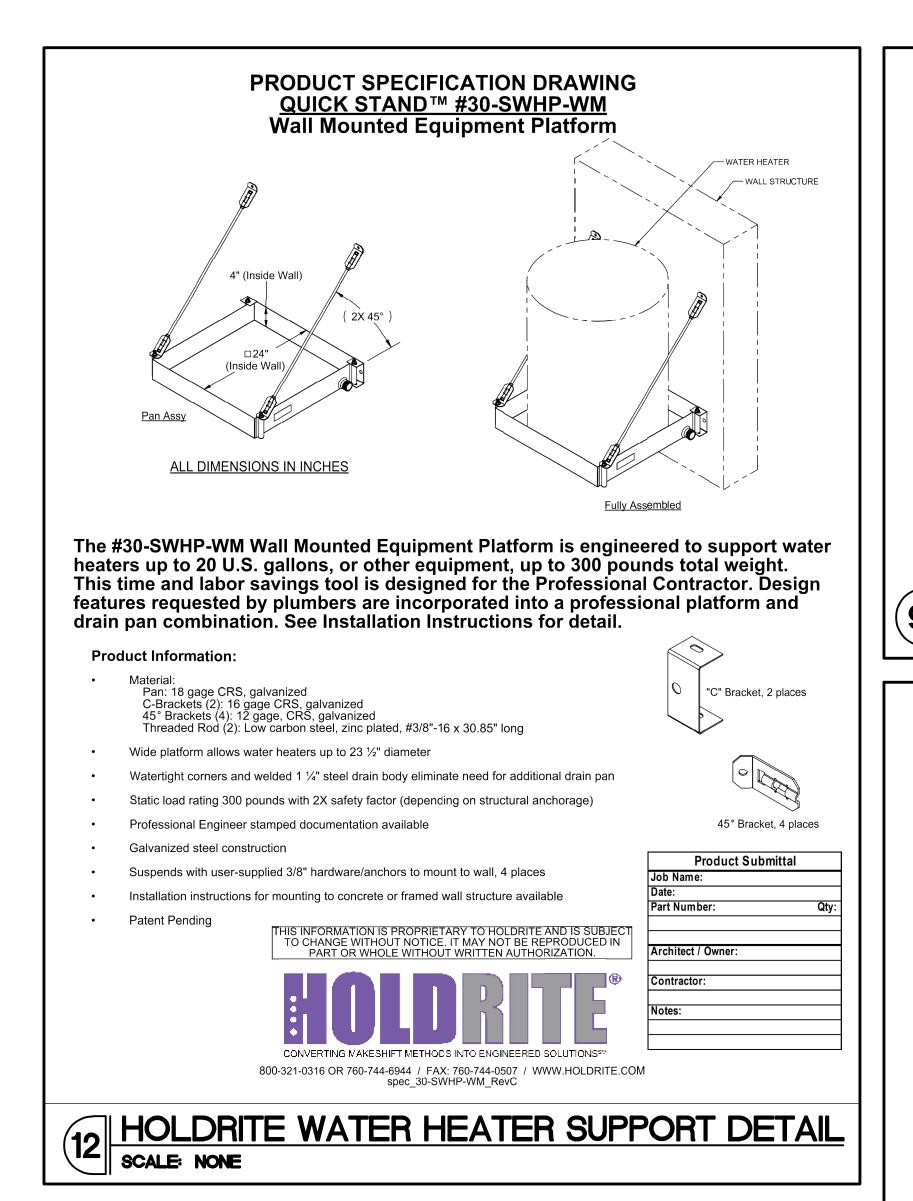
BACKFLOW PREVENTION, CLEAN AND PROVIDE GENERAL MAINTENANCE, REPAIR/REPLACE IF

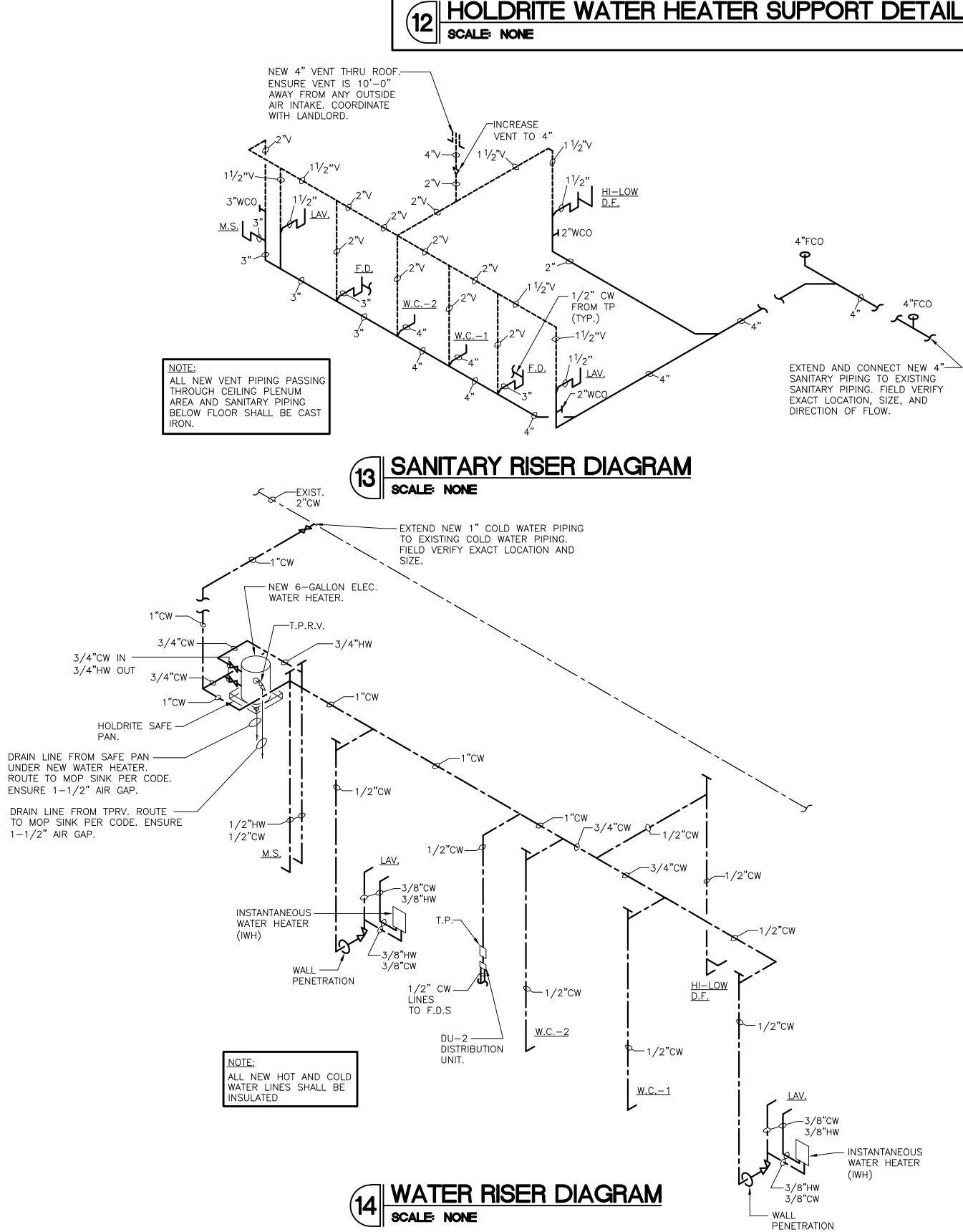
18) EXISTING FLOOR CLEAN OUT TO REMAIN. FIELD VERIFY EXACT SIZE, LOCATION AND FLOW. CLEAN AND PROVIDE GENERAL MAINTENANCE.

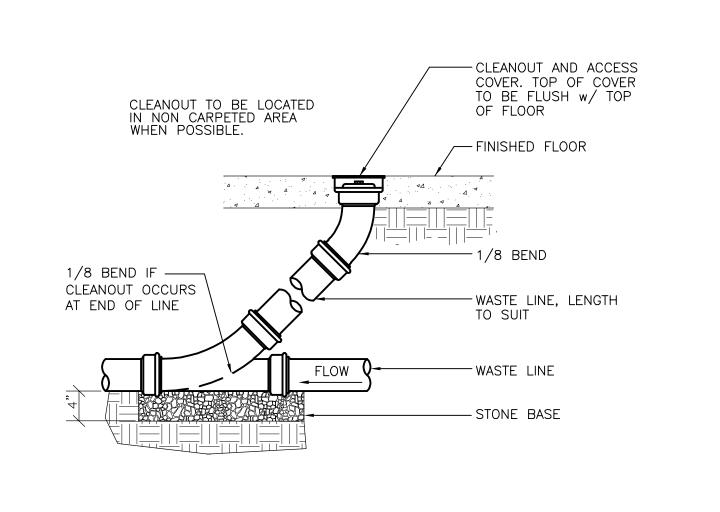
LOCATIONS AND SIZES. CAP WATER, SANITARY, AND VENT LINES BACK TO POINT OF REUSE.

City of Puyallup Development & Permitting Services **ISSUED PERMIT** Planning

Public Works

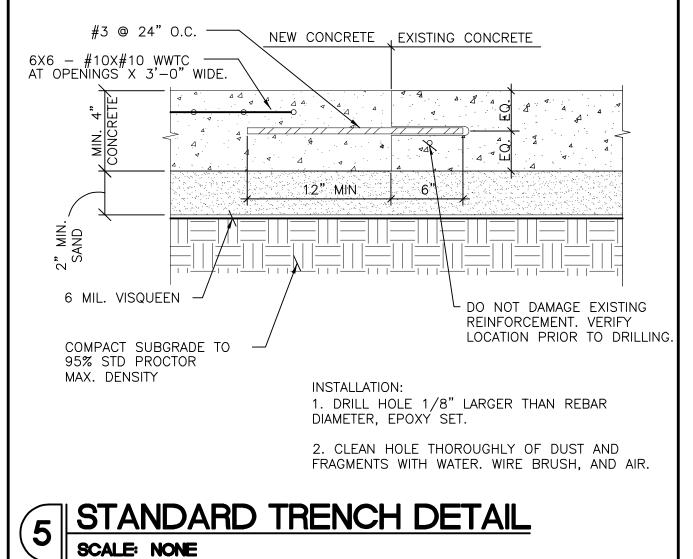


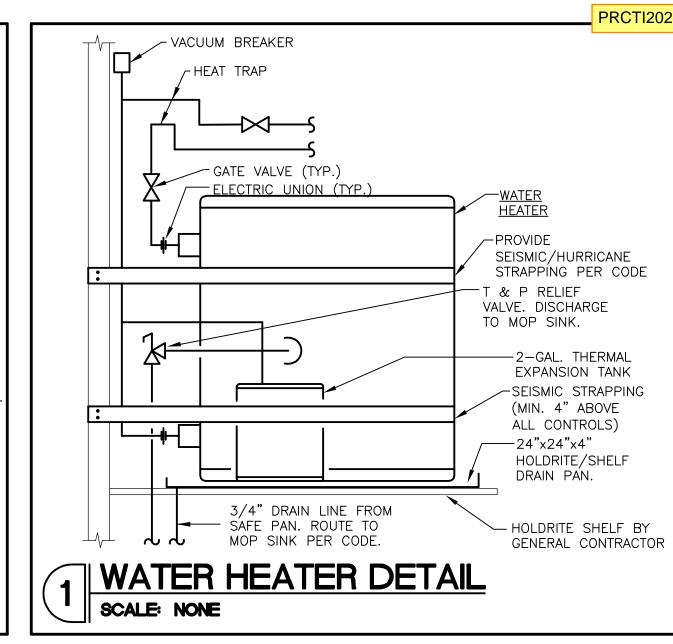




9 FLOOR CLEANOUT DETAIL SCALE: NONE

SCALE: NONE





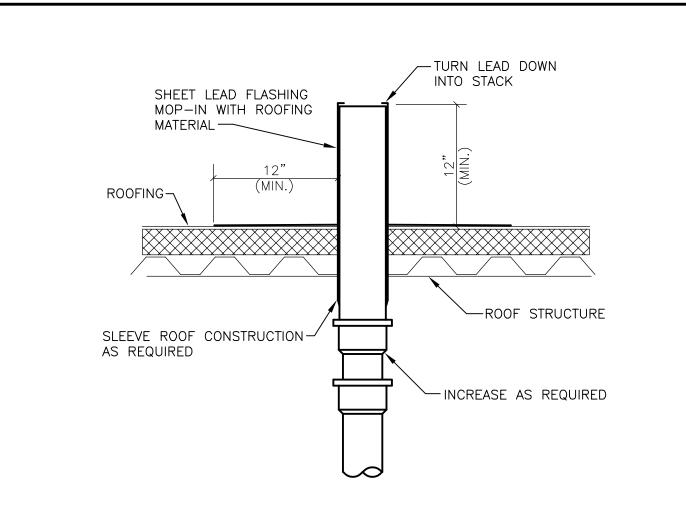
MOP HANGER-

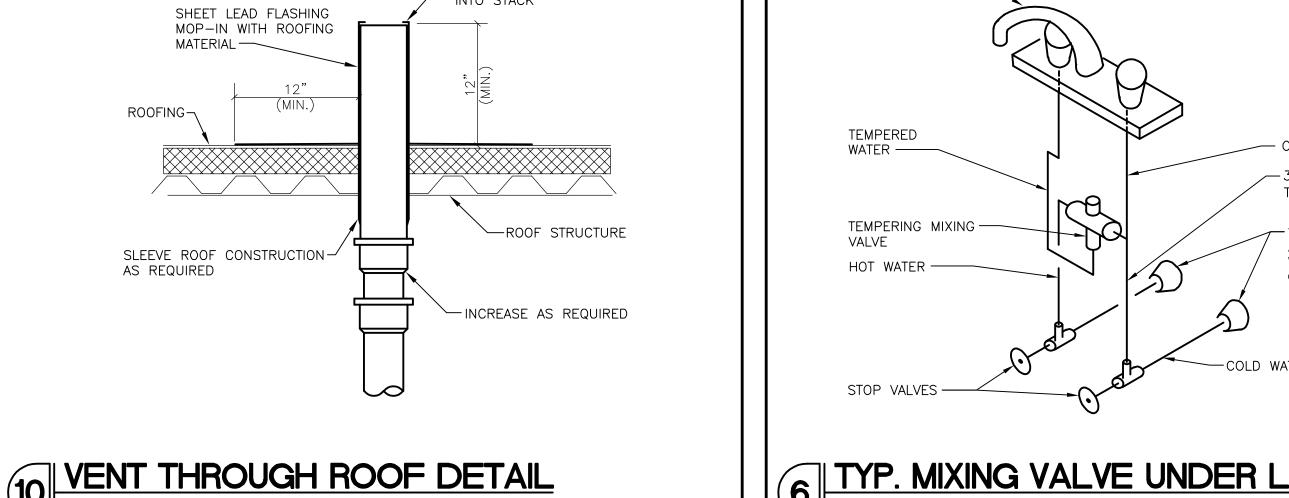
SERVICE FAUCET WITH -

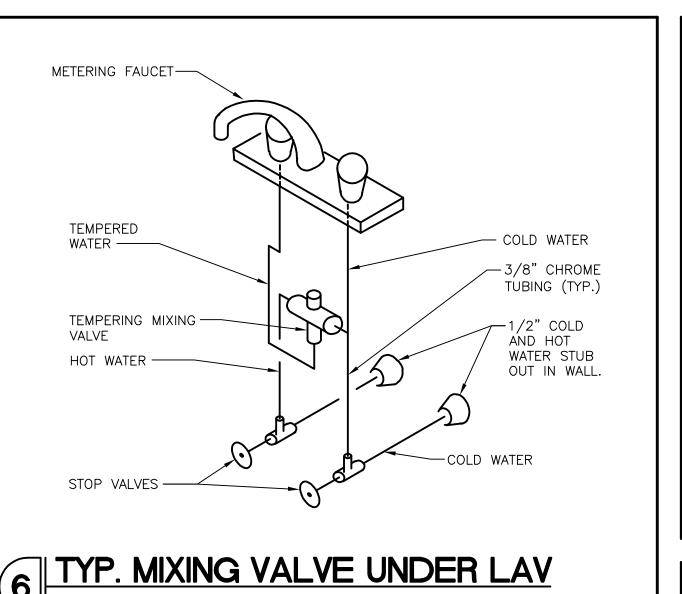
30"HOSE-

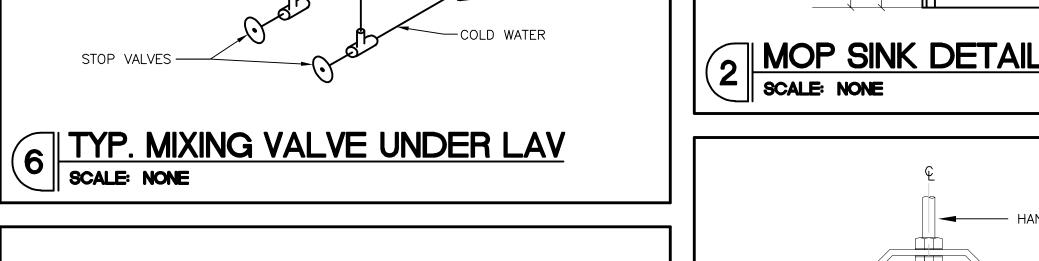
HOSE BRACKET-

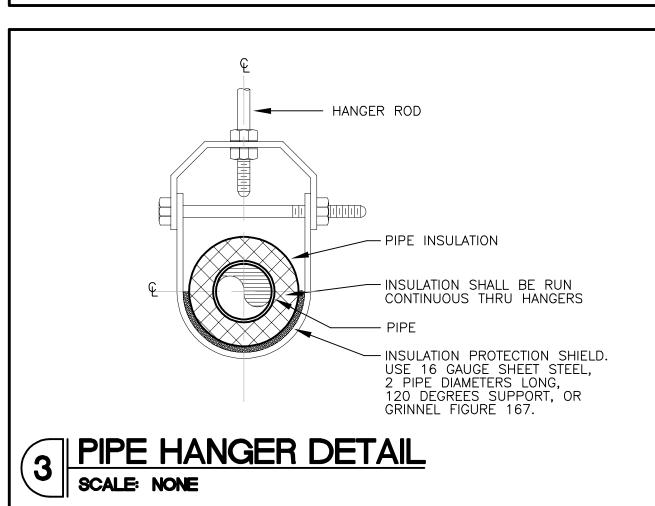
VACUUM BREAKER







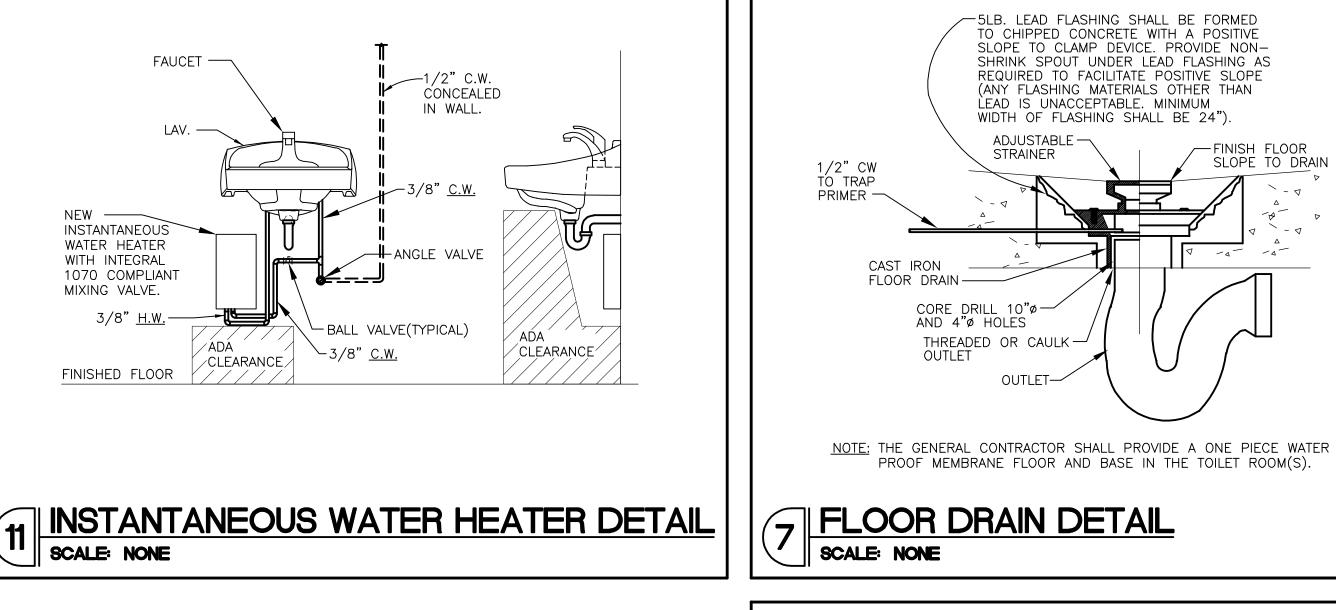


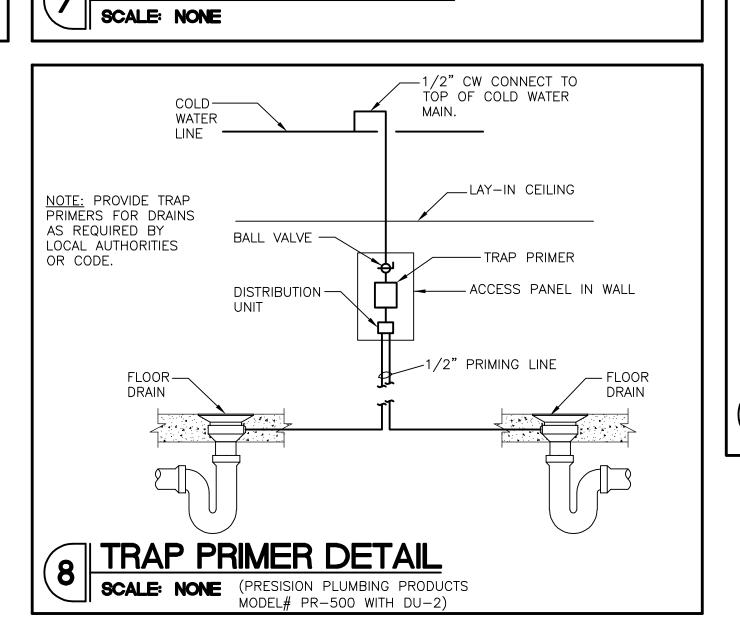


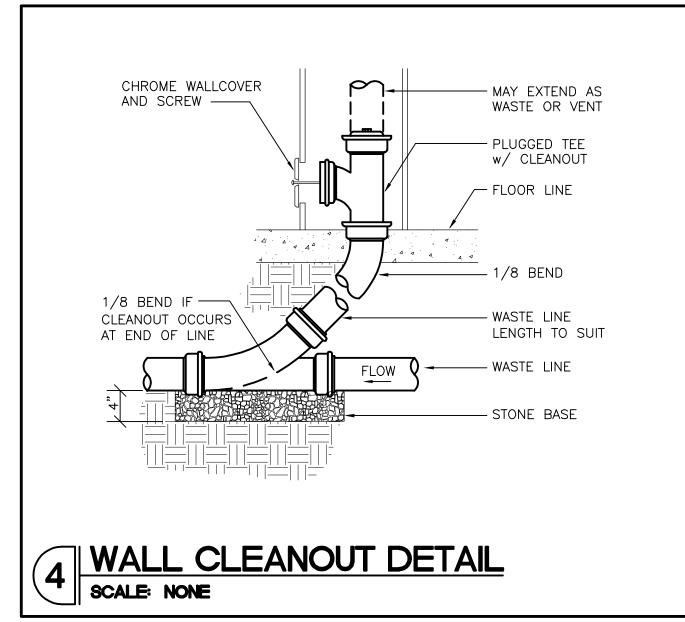
APPLY SILICONE SEALANT

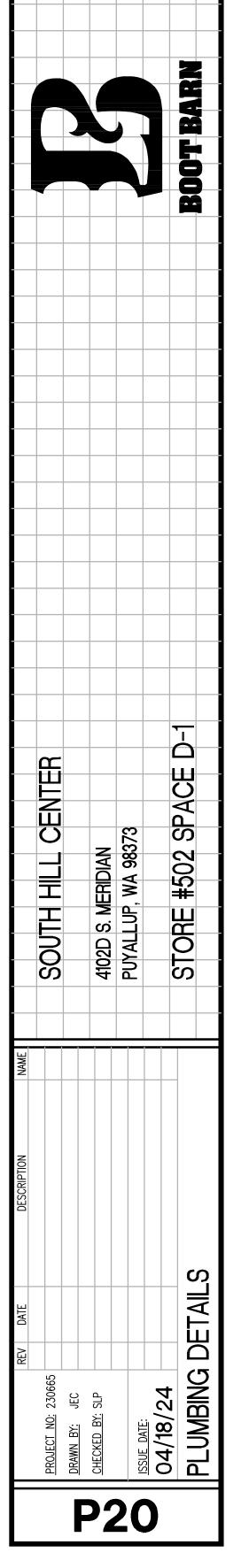
BETWEEN MOP SINK AND

ADJACENT SURFACES









2

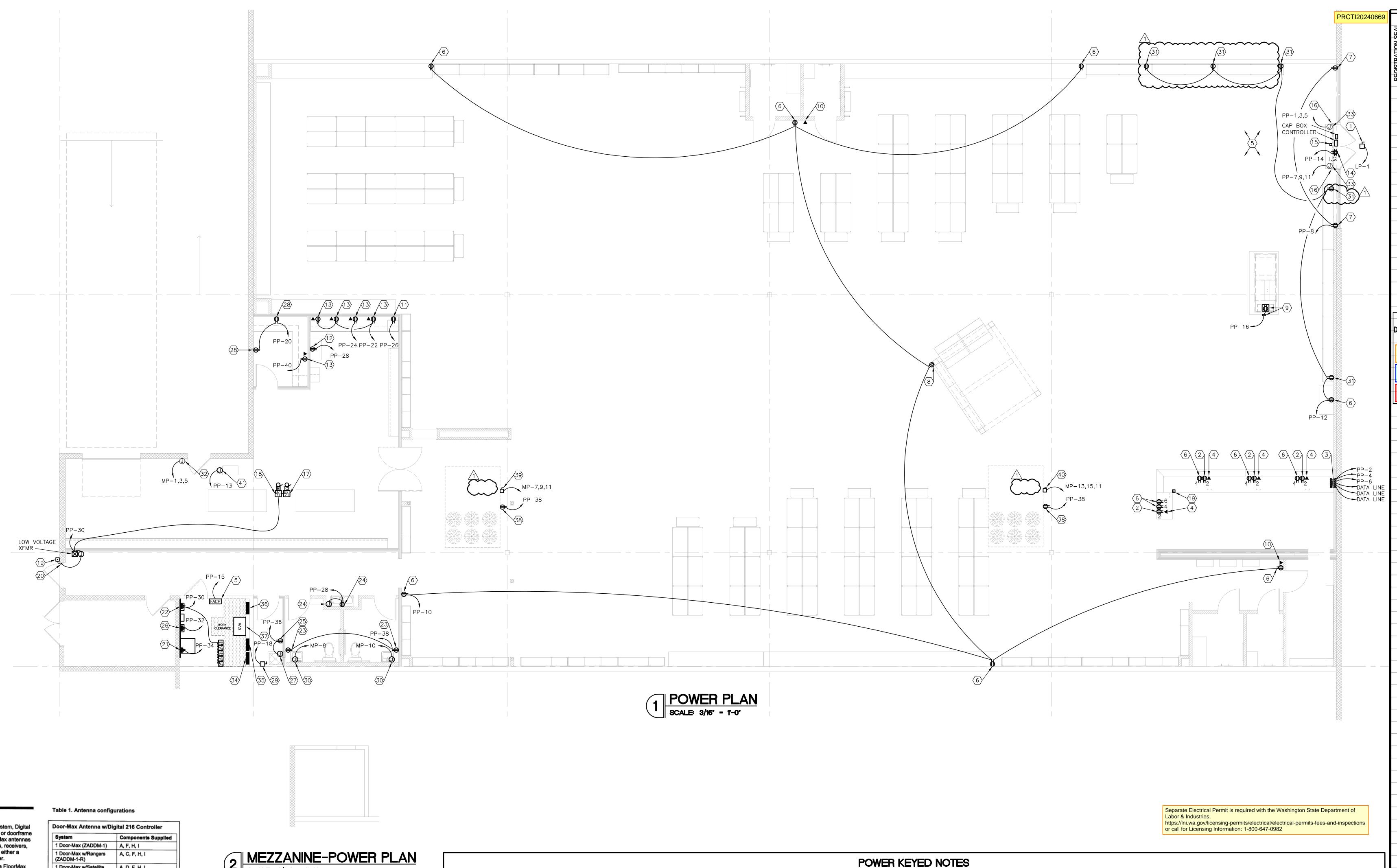
City of Puyallup

Development & Permitting Services

ISSUED PERMIT

Public Works

Traffic

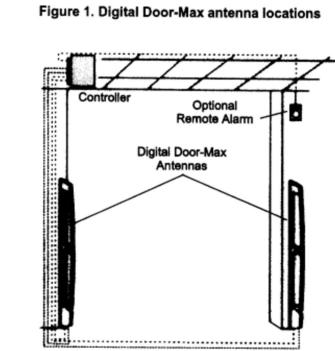


Antenna Overview

Part of an Ultra*Max® EAS security system, Digital Door-Max antennas attach to the wall or doorframe surrounding an exit. Up to two Door-Max antennas (Figure 1) can be used as transmitters, receivers, or transceivers by connecting them to either a Digital 216 or Ultra*Post Plus controller.

Plus antenna is added. Antenna configurations are listed in Table 1 Other antenna configurations or additional antennas require the use of a second

Wide exits can be covered when a FloorMax



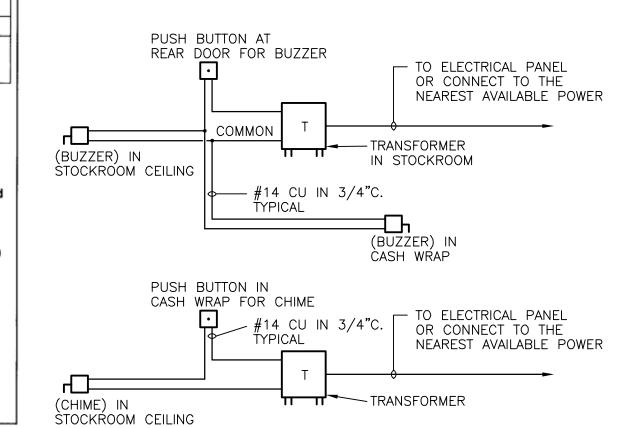
System	Components Supplied
1 Door-Max (ZADDM-1)	A, F, H, I
1 Door-Max w/Rangers (ZADDM-1-R)	A, C, F, H, I
1 Door-Max w/Satellite Receiver (ZADDM-1-SR)	A, D, F, H, I
2 Door-Max (ZADDM-2)	B, F, H, J
System	Components Supplied
System 1 Door-Max Transceiver 1 Door-Max Transceiver	Components Supplied
System 1 Door-Max Transceiver 1 Door-Max Transceiver with 1 Satellite Receiver 1 Door-Max Transceiver	Components Supplied A, G, H, K, L, M, N
1 Door-Max Transceiver with 1 Satellite Receiver	A, G, H, K, L, M, N A, D, G, H, K, L, M, N

- A. 1 Digital Door-Max Antenna (ZSDDM) B. 2 Digital Door-Max Antennas (ZSDDM) 1 Pair Ranger Antennas (ZKRANGER-1) 1 Satellite Receiver (ZKRXMULLMT) 1 FloorMax Plus Antenna 1 Digital 216 Controller (ZED216)
- G. 1 Ultra*Post Plus Controller (ZEUPPLUS-E3) and 1 Enclosure Assembly (ZPDFM-E) H. 1 Power Cord EMC USA 125 V Power Cord (0351-2179-01) "B" Schuko (EUR) 250V Power Cord (0351-0547-02) "D" UK 250V Power Cord (0351-0547-03) "J" Japan 125 V Power Cord (0351-0547-04)
- Australia to IEC 32 Power Cord (0351-0547-07) 1 Mounting Kit (ZPDDM-M1 or ZPDDM-M2) J. 2 Mounting Kits (ZPDDM-M1 or ZPDDM-M2) K. 8 Contact Sockets (2109-0282-26) L. 2 Connectors, HSG, 4-Pin (2109-0282-04) M. 2 TM, QD, 1/4x.032, RCP, INS, 22-18

N. Filter, EMI, FR, 10MID, 2000 (2700-0034-01)

DIGITAL DOOR-MAX SYSTEM

MEZZANINE-POWER PLAN
SCALE: 3/16" - 1'-0"



BUZZER AND CHIME SCHEMATIC

1. BUZZER RINGS AT CASHWRAP AND IN STOCKROOM FROM REAR DOOR. CHIME RINGS IN STOCKROOM FROM CASHWRAP.

$| \rangle$ e.c. shall install disconnect switch for signage circuit(s) as REQUIRED BY N.E.C. 600. REFER TO PLANS FOR NUMBER OF CIRCUITS

- THE CIRCUITS USED TO POWER THE ELECTRONIC CASH REGISTERS SHALL NOT BE USED FOR ANY OTHER PURPOSE. CIRCUITS SHALL NOT SHARE NEUTRAL OR GROUND WITH OTHER EQUIPMENT. SEPARATE POWER, NEUTRAL, AND DEDICATED GROUND WIRES, MINIMUM SIZE #12 AWG SHALL BE RUN TO THE CIRCUIT BREAKER PANEL BOARD WHERE GROUND WIRE SHALL BE TIED TO THE GROUND TERMINAL. DO NOT USE CONDUIT FOR GROUNDING AS THIS MAY NOT BE CONTINUOUS. CASH REGISTER CIRCUIT SHALL BE RUN IN SEPARATE CONDUIT. RECEPTACLE AND COVER PLATE TO (11) 20A RATED @ +42" FOR MICROWAVE, COORDINATE EXACT LOCATION.
- PROVIDE 1" CONDUIT AND WIRE FOR POWER TO P.O.S. AND GENERAL RECEPTACLES AND TELEPHONE OUTLETS TO BE LOCATED AT CABINET BOTTOM. ROUTE CONDUITS AS SHOWN ON PLAN DOWN WALL OR COLUMN AND BY SAW CUTTING OR CORE DRILLING FLOOR AS REQUIRED BY LANDLORD. PATCH FLOOR AS REQUIRED. LEAVE A (12) TWELVE FOOT FLEX WHIP FOR EACH POWER CIRCUIT CONDUIT REQUIRED. COORDINATE EXACT CONFIGURATION WITH TENANT REP. AND LOCATION WITH FIXTURE INSTALLER.
- 4 E.C. TO INSTALL THREE CONTINUOUS 1" CONDUIT FOR DATA WITH PULL STRING FROM THE PHONE BOARD INTO THE P.O.S SECTION OF THE CASHWRAP WITH 12'-0" OF SLACK ON EACH CABLE AND LABEL "POS/PHONES" EACH.
- 5 E.C. SHALL FIELD VERIFY EXACT REQUIREMENTS FOR SMOKE/FIRE ALARM SYSTEM. REUSE ANY EXISTING DETECTION SYSTEM. REPLACE ANY DEFECTIVE DEVICES. IF THERE IS NOT AN EXISTING SYSTEM, E.C. SHALL SUPPLY AND INSTALL ALL NECESSARY EQUIPMENT (SMOKE DETECTORS, AUDIO/VISUAL ALARMS, FIRE ALARM PANEL, CONDUIT, WIRE, ETC.) FOR A NEW SYSTEM AS MAY BE REQUIRED BY LANDLORD AND/OR LOCAL FIRE MARSHALL. INSTALL SMOKE DETECTORS IN SUPPLY OR RETURN DUCTWORK AS REQUIRED BY LOCAL AUTHORITY. FIELD VERIFY AND COORDINATE. IF FIRE
- PANEL REQUIRED, G.C. TO USE BOSCH, FIRELITE, OR SILENT KNIGHT ONLY. 6 > DUPLEX RECEPTACLE FLUSH MOUNTED VERTICAL IN WALL AT 18" A.F.F. FOR GENERAL USE. RECEPTACLE AND COVER PLATE TO BE WHITE.
- 8 DUPLEX RECEPTACLE FLUSH MOUNTED VERTICAL IN COLUMN AT 18" A.F.F. FOR BOOT FINDER KIOSK. RECEPTACLE AND COVER PLATE TO BE WHITE. VERIFY FINAL LOCATION.

7) DUPLEX RECEPTACLE FLUSH MOUNTED PER N.E.C. 210-62.

$\langle 9 angle$ DUPLEX RECEPTACLE MOUNTED UNDER CABINET FOR STEAMER. COORDINATE EXACT CONFIGURATION WITH TENANT REP. AND LOCATION WITH FIXTURE INSTALLER. E.C. TO INSTALL ELECTRICAL POWER POLE FROM STRUCTURE ABOVE TO FIXTURE BELOW WITH A 1/2" CONDUIT FROM

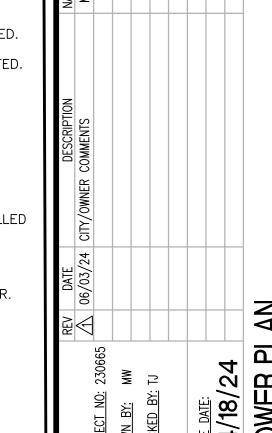
- POWER POLE TO RECEPTACLE TO PROVIDE POWER. $\langle 10 \rangle$ E.C. TO INSTALL 3/4" CONDUIT WITH PULL STRING FROM DECK ABOVE TO DATA OUTLET FOR WALL MOUNTED PHONE AT 60" A.F.F.. EXTEND CONDUIT UP INSIDE DEMISING WALL TO DECK. FIELD VERIFY EXACT LOCATION AND REQUIREMENTS.
- $\langle 12 \rangle$ 20A RATED @ +15" FOR REFRIGERATOR, COORDINATE EXACT LOCATION. (13) DUPLEX RECEPTACLE AND DATA OUTLET MOUNTED AT 18" A.F.F. E.C. SHALL PROVIDE (6) CAT 6 PLENUM RATED CABLE FROM THE PHONE BOARD IN CONTINUOUS 1" CONDUIT TO DATA OUTLET UNDER COUNTER WITH 6'-0" OF SLACK AT EACH END AND LABEL "STK/MNGR DATA" EACH
- (14) 20A RATED QUAD DEDICATED RECEPTACLE WITH ISOLATED GROUND ABOVE CEILING FOR EAS SYSTEM. THE AC SOURCE MUST BE A 3-WIRE 24 HOUR UNSWITCHED OUTLET WITH LESS THAN 0.5 VAC BETWEEN NEUTRAL AND GROUND. UNSHARED NEUTRAL AND GROUND MUST BE FROM THE DEDICATED QUADPLEX TO THE CIRCUIT BREAKER PANEL IN THE BACK. PROVIDE "LOCK-ON" DEVICE ON BREAKER AT PANEL. PROVIDE 1" OR 3/4" CONDUIT FROM POWER PACK ABOVE CEILING DOWN TO EACH ANTENNA. CONDUIT RUN CANNOT EXCEED 30 FEET AND MUST BE HIDDEN IN WALLS OR MULLION. VERIFY EXACT SPECS WITH EAS ELECTRONIC CORPORATION. SEE DETAIL THIS SHEET.
- (15) EAS ALARM BOX MOUNTED ON THE WALL ABOVE THE DOORS. E.C. TO INSTALL 3/4" CONDUIT WITH PULL STRING TO THE PHONEBOARD LOCATED BACK IN THE STOCKROOM. VERIFY AND COORDINATE EXACT LOCATION AND OTHER RELATED ELECTRICAL REQUIREMENTS.
- (16) EAS PEDISTALS. SEE DETAIL ON THIS SHEET. VENDOR TO SUPPLY AND INSTALL SURFACE MOUNTED WIREMOLD.
- (17) LOW VOLTAGE CHIME MOUNTED IN STOCKROOM CEILING, ACTIVATED BY A PUSH BUTTON SWITCH MOUNTED IN CASHWRAP (MOTHER STATION), SEE DETAIL ON THIS SHEET.

- 18 LOW VOLTAGE BUZZER MOUNTED IN STOCKROOM CEILING AND ANOTHER BUZZER LOCATED IN CASHWRAP (MOTHER STATION) TO BE ACTIVATED BY A PUSH BUTTON SWITCH AT BACK DOOR. SEE DETAILS ON THIS SHEET.
- (19) PROVIDE PUSH-BUTTON FOR BUZZER AT BACK DOOR AND PROVIDE PUSH-BUTTON FOR CHIME AT CASHWRAP SEE DETAILS ON THIS SHEET. E.C. SHALL SUPPLY AND INSTALL THE FOLLOWING SERVICE BELL SYSTEM: a) EDWARDS #852 PUSHBUTTON
- EDWARDS #88-50 TRANSFORMER EDWARDS #340A-G5 BUZZER

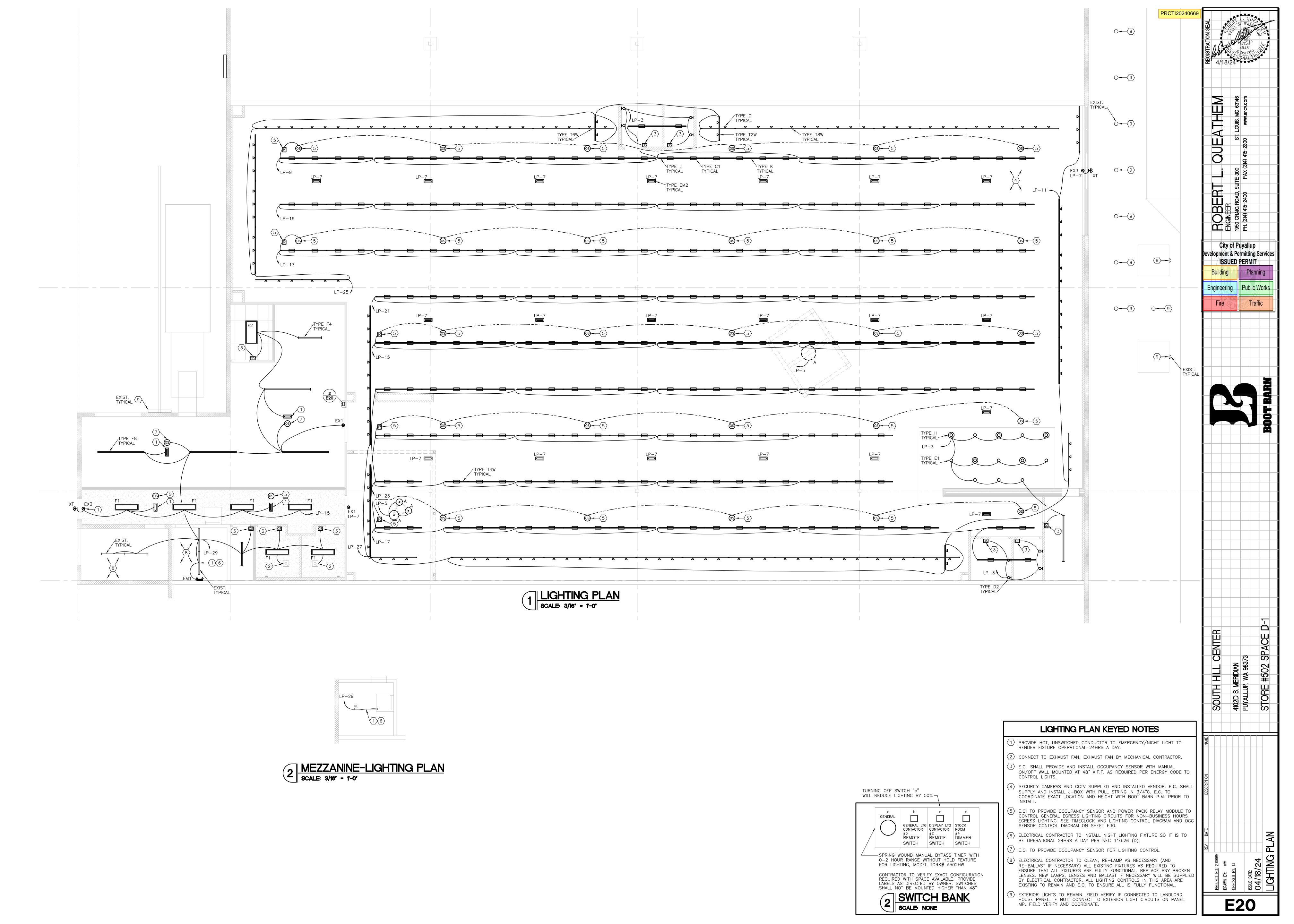
d) EDWARDS #338-G5 CHIME

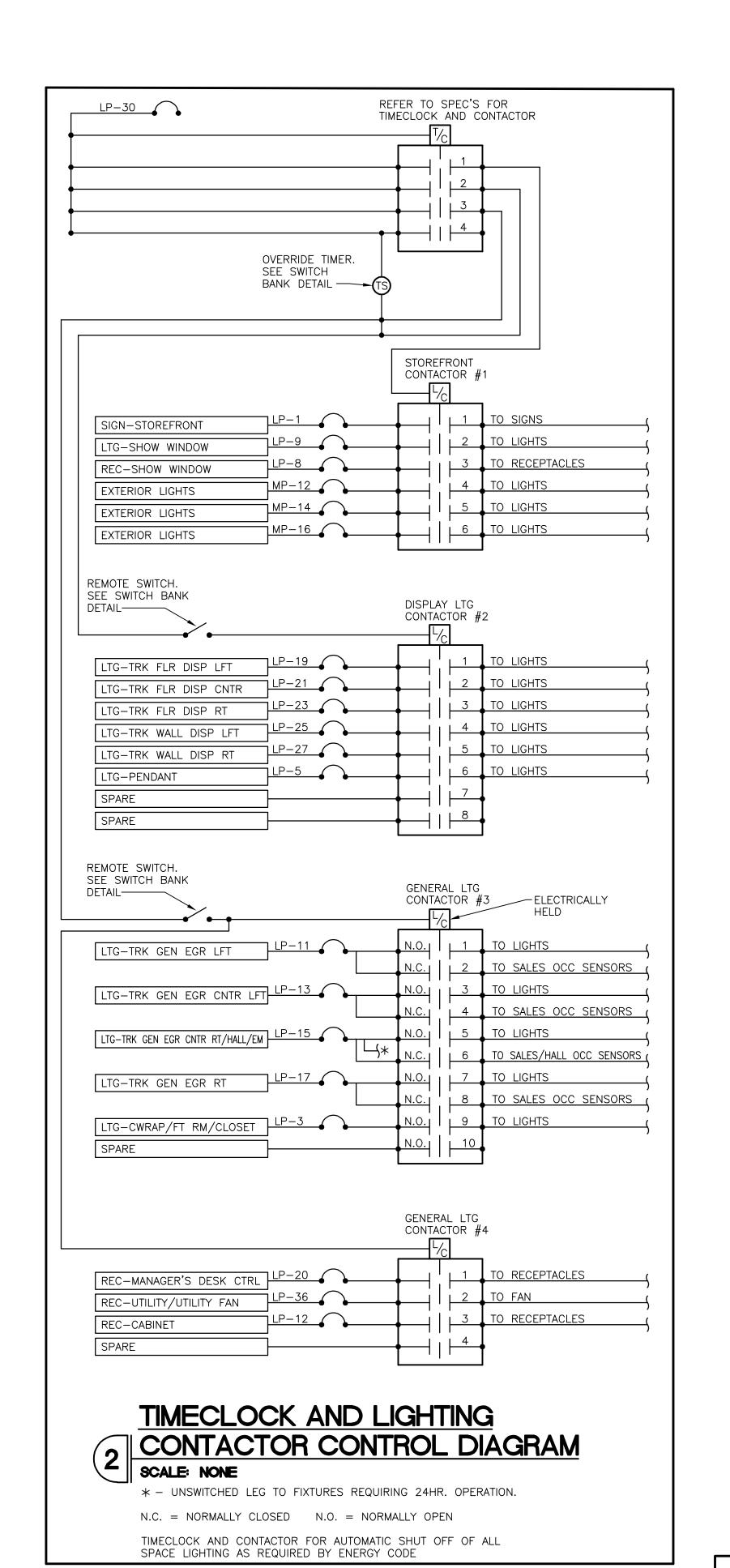
- (20) DOOR ALARM CONTACT MOUNTED IN HEAD OF DOOR FRAME WITH MAGNET MOUNTED IN TOP OF DOOR AT BACK OF HOUSE. PROVIDE JUNCTION BOX
- (21) FIELD VERIFY EXACT LOCATION OF LANDLORD TELEPHONE SERVICE STUB-IN (34) PANEL "LP". REFER TO PANEL SCHEDULE. AND EXTEND AS REQUIRED FOR CONNECTION TO TENANT TELEPHONE EQUIPMENT. PROVIDE PLYWOOD BACKBOARD ON FINISHED WALL FOR MOUNTING OF TELEPHONE EQUIPMENT. SIZE AND SECURE AS REQUIRED. PROVIDE DEDICATED GROUND QUADPLEX RECEPTACLE FOR POWER TO TELEPHONE EQUIPMENT. PROVIDE THREE 1" CONDUIT WITH PULL STRING FROM ABOVE CEILING TO "IT" CABINET BELOW. SEE SHEET A6.2.
- 22 PROVIDE QUADPLEX RECEPTACLE VERIFY EXACT LOCATION WITH FIXTURE VENDOR. SEE SHEET A6.2.
- (23) G.F.I. DUPLEX RECEPTACLE FLUSH MOUNTED AT 42" A.F.F. COORDINATE EXACT LOCATION.
- (24) DUPLEX RECEPTACLE TO BE LOCATED PER DRINKING FOUNTAIN MANUFACTURE SPECIFICATIONS. FIELD COORDINATE EXACT LOCATION. PROVIDE A BLANK FACE 20A GFCI DEVICE (LEVITON #7590 OR APPROVED EQUAL), UPSTREAM OF THE RECEPTACLE, FOR GFCI PROTECTION/REMOTE RESET. BLANK FACE DEVICE SHALL BE MOUNTED IN AN ACCESSIBLE LOCATION AND FLUSH MOUNTED IN WALL AT 48" ADJACENT TO DRINKING FOUNTAIN.
- (25) G.F.I. RECEPTACLE AT 36" A.F.F.. COORDINATE EXACT LOCATION.
- Q6 QUADUPLEX RECEPTACLE FOR SECURITY PANEL. FIELD VERIFY LOCATION
- WITH SECURITY SYSTEM VENDOR. SEE SHEET A6.2. J-BOX FOR CONNECTION OF UTILITY EXHAUST FAN. TO BE CONTROLLED BY TIME CLOCK. FIELD VERIFY LOCATION.

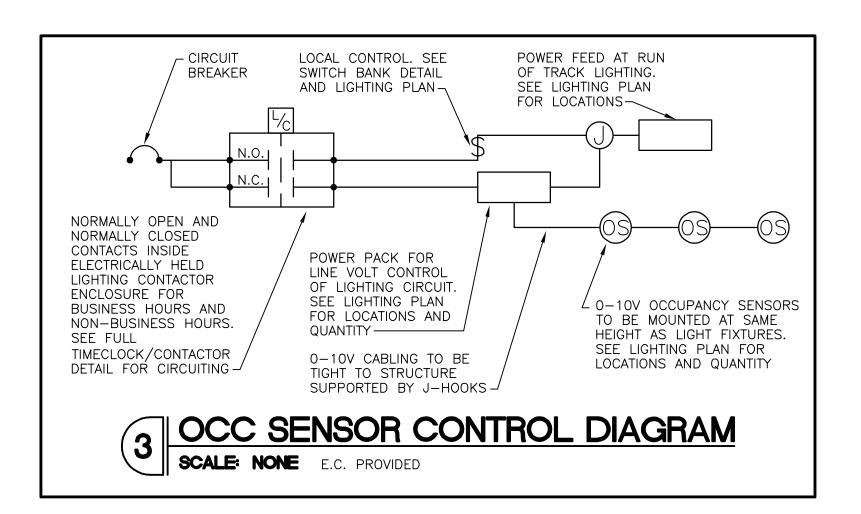
- (28) PROVIDE RECEPTACLE MARKED CONTROLLED RECEPTACLE LEVITON #5362-S2 SERIES (NEMA 5-20R) CONTROLLED BY TIME CLOCK PER LOCAL ENERGY CODE. FIELD VERIFY AND COORDINATE.
- (29) NON-FUSED DISCONNECT SWITCH MOUNTED ABOVE FOR CONNECTION OF TANK TYPE WATER HEATER.
- (30) J-BOX MOUNTED BELOW LAV. FOR INSTANTANEOUS TYPE WATER HEATER. (31) DUPLEX RECEPTACLE FLUSH MOUNTED VERTICAL IN WALL AT 108" A.F.F.. RECEPTACLE AND COVER PLATE TO BE WHITE.
- (32) EXISTING COMPACTOR CONNECTION TO REMAIN. RECIRCUIT AS INDICATED.
- ABOVE CEILING WITH 1/2" CONDUIT STUBBED INTO HEAD OF DOOR FRAME. 33 EXISTING AIR CURTAIN CONNECTION TO REMAIN. RECIRCUIT AS INDICATED.
 - (35) PANEL "PP". REFER TO PANEL SCHEDULE.
 - (36) PANEL "MP". REFER TO PANEL SCHEDULE.
 - (37) TRANSFORMER. REFER TO ONE-LINE. (38) WEATHERPROOF G.F.C.I. RECEPTACLE PROVIDED BY E.C. TO BE INSTALLED
 - PER N.E.C. 210-63. (39) EXISTING 480V, 3ø, DISCONNECT FOR RTU-1 34 F.L.A., GAS HEATER.
 - $\langle 40 \rangle$ EXISTING 480V, 3ø, DISCONNECT FOR RTU-2 36.6 F.L.A., GAS HEATER. $\langle 41 \rangle$ EXISTING GUH-1 CONNECTION TO REMAIN. RECIRCUIT AS INDICATED.

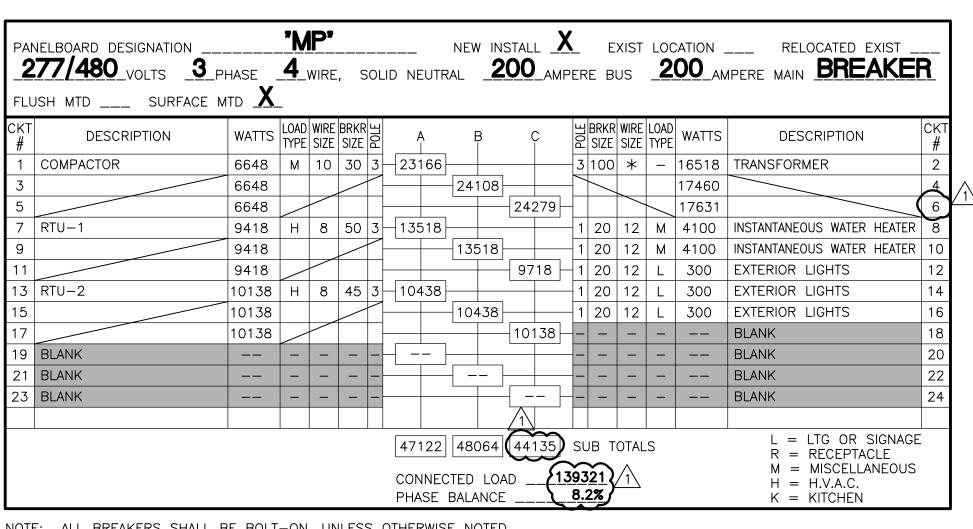


E10









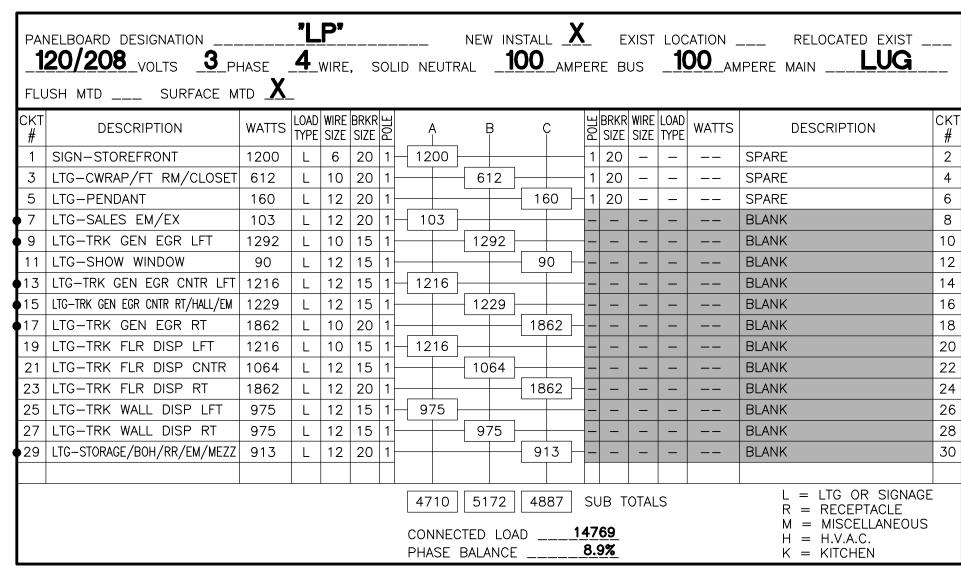
- NOTE: ALL BREAKERS SHALL BE BOLT-ON, UNLESS OTHERWISE NOTED. – INDICATES THIS CIRCUIT TO RECEIVE HANDLE LOCK-ON CLIP
- * REFER TO ONE-LINE DIAGRAM FOR WIRE SIZE TO THIS EQUIPMENT

PANEL MP DEMA	AND
DESCRIPTION	TOTAL WATTS
TRANSFORMER	63825
COMPACTOR (80% OF BREAKER)	19944
WATER HEATER	8200
LIGHTING LOAD	900
25% CONTINUOUS LOAD	225
HVAC	58668
25% LARGEST MOTOR	1662
TOTAL DEMAND WATTS	153424
TOTAL DEMAND AMPS (480V)	184.6

ROOF LINE

PANEL LP DEM	
DESCRIPTION	TOTAL WATTS
TRACK 145A X 120V CIRCUIT BREAKER	17400
25% CONTINUOUS LOAD	4350
REMAINING TRACK 16FEET X 75WATTS	1200
25% CONTINUOUS LOAD	300
REMAINING LIGHTING/SIGN LOAD	2988
25% CONTINUOUS LOAD	747
TOTAL DEMAND WATTS	26985
TOTAL DEMAND AMPS (208V)	75.0

PANEL PP DEM	IAND
DESCRIPTION	TOTAL WATTS
MISC	900
RECEPTACLES	12696
WATER HEATER	1500
AIR CURTAIN	21024
GUH-1	720
PANEL LP	26985
TOTAL DEMAND WATTS	63825
TOTAL DEMAND AMPS (208V)	177.3



- NOTE: ALL BREAKERS SHALL BE BOLT-ON, UNLESS OTHERWISE NOTED. – INDICATES THIS CIRCUIT TO RECEIVE HANDLE LOCK-ON CLIP
- * REFER TO ONE-LINE DIAGRAM FOR WIRE SIZE TO THIS EQUIPMENT

1	NELBOARD DESIGNATION $__$		<u>"P</u>	P "				NEW	INST	ALL _	X	-	EXIST	r Loc	ATION .	RELOCATED EXIST _	
	20/208 VOLTS 3 F	PHASE	4	WIRE	., S	OLID	NEUTR	RAL _	22	2 5 _AM	PE	RE	3US	2	<u>25</u> _AM	IPERE MAIN BREAKE	R
FLU	JSH MTD SURFACE	MTD 👗	_														
KT #	DESCRIPTION	WATTS	LOAD TYPE	WIRE SIZE	BRKR SIZE	POLE	A	В		C	L G	를 BRM SIZ	R WIRE	E LOAD TYPE	WATTS	DESCRIPTION	CKT #
1	AIR CURTAIN	3672	Н	8	40	3	4392				_	1 20	10	R	720	REC-CASHWRAP POS	2
3		3672						4392	2 —		\dashv	1 20) 10	R	720	REC-CASHWRAP GENERAL	4
5		3672							\dashv	4172	\dashv	1 20) 10	R	500	REC-CASHWRAP PRINTER	6
7	AIR CURTAIN	3336	Н	8	35	3	3696					1 20	10	R	360	REC-SHOW WINDOW	8
9		3336						4596	5 <u> </u>		_	1 20	10	R	1260	REC-SALES GENERAL	10
l 1		3336							$=$ \lceil	4416	-	1 20	10	R	1080	REC-CABINET	12
3	GUH-1	720	Н	12	20	1 $+$	1080				-	1 20	10	R	360	REC-EAS SYSTEM	14
5	FACP	180	М	12	20	1		1180) 			1 20	8 (R	1000	REC-HAT STEAMER	16
7	SPARE		_	_	20	1				1500	_	1 20	12	М	1500	WATER HEATER	18
9	SPARE		_	_	20	1 -	360				_	1 20	12	R	360	REC-MANAGERS DSK CTRL	. 20
21	SPARE		_	_	20	1		540			\dashv	1 20	12	R	540	REC-STOCKROOM DESK	22
23	SPARE		_	_	20	1			$=$ \lceil	500		1 20	12	R	500	REC-STOCK PRINTER	24
25	SPARE		-	_	20	1 - 1	1200					1 20	12	R	1200	REC-MICROWAVE	26
27	SPARE		_	_	20	1		1040				1 20) 12	R	1040	REC-FRIDGE/WTR FOUNT.	28
29	SPARE		_	_	20	1			=	720		1 20) 12	М	720	PH.BD./BUZZER/TC	30
31	SPARE		_	_	20	1 -	360				\perp	1 20	12	R	360	REC-SECURITY	32
33	SPARE		_	_	20	1		360			_	1 20) 12	R	360	REC-IT CABINET	34
35	SPARE		_	-	20	1		-	$=$ \lceil	1436	_	1 20) 12	R	1436	REC-UTILITY/UTILITY FAN	36
37	PANEL LP	4710	_	*	100	3	5430				\dashv	1 20) 10	R	720	REC-HVAC/RESTROOM	38
39		5172						5352	2 —		\dashv	1 20) 12	R	180	REC-MANAGERS DESK	40
11		4887							$=$ Γ	4887	-	- -	-	-		BLANK	42
									/	1							
				•	•		16518			17631	~	609	TOTA	LS		L = LTG OR SIGNAGE R = RECEPTACLE M = MISCELLANEOUS H = H.V.A.C.	

E.C. SHALL PROVIDE ISOLATED GROUND BAR.

- NOTE: ALL BREAKERS SHALL BE BOLT-ON, UNLESS OTHERWISE NOTED.
- INDICATES THIS CIRCUIT TO RECEIVE HANDLE LOCK—ON CLIP * - REFER TO ONE-LINE DIAGRAM FOR WIRE SIZE TO THIS EQUIPMENT

RI	NEW 4 #3/0 1 #6 G PANEL MP EFER TO PANEL CHEDULE	PANEL PP REFER TO PANEL SCHEDULE NE 4 1 1	NEW 4 #3, 1-1/4"C 1 #8 GND PANEL LP REFER TO PANEL SCHEDULE EW #4/0, 2-1/2"C #4 GND #4 ISO GND	M -	NEW 4 #3/0, 2-1/2"C 1 #6 GND —FIELD VERIFY EXACT METER REQUIREMENTS —EXISTING 200A.S. SERVICE FROM LANDLORD 277/480V, 3Ø, 4W ELEC. DISTRIBUTION EQUIPMENT
1 #4 GND TO BLDG S	TEEL	TRANSF	5KVA, 3ø FORMER 20/208V	LEASE LINE	FLOOR_LINE

1 ELECTRICAL ONE-LINE DIAGRAM

- 1. ALL WIRE SHALL BE COPPER ONLY, THW, THWN, 3. ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMER, THHW, OR NEC APPROVED EQUAL OR BETTER. ALL LIGHTS, DEVICES, CONDUIT, WIRE, ETC.) NOT BEING WIRING SHALL BE IN CONDUIT. WIRE AMPACITY BASED USED SHALL BE REMOVED FROM THE SITE. ON NEC 110-14c AND TABLE 310-16. DO NOT ABANDON IN PLACE.
- 2. E.C. SHALL FURNISH ALL NEW ELECTRICAL EQUIP. (PANELS, TRANSFORMER, CONDUITS, WIRE, METERS, SERVICE FEEDERS AND CONDUIT, DISC SWITCHES, CONTACTORS, TIMECLOCKS, ETC) AS REQUIRED, UNLESS NOTED OTHERWISE.

CURRENT LIMITING PANEL

4. E.C. SHALL FIELD VERIFY ALL EXISTING ELECTRICAL EQUIPMENT. ALSO FIELD VERIFY THAT ANY EXISTING ELEC. EQUIPMENT TO BE REUSED IS OF ADEQUATE SIZE AND CONDITION TO MAINTAIN SAFE OPERATION. IF DISCREPANCIES ARISE CONTACT PROJECT REP.

	SYMBOL	LEGEN	D
Ф	UNIPLEX RECEPTACLE (SINGLE)	•	DOORBELL PUSHBUTTON
Ф	DUPLEX RECEPTACLE	R	DOORBELL
Ф	DUPLEX FLOOR MOUNTED	<u>。</u>	DOORBELL LOW-VOLT TRANS
₩	DUPLEX ISOLATED GROUND	<u> </u>	LOW-VOLTAGE TRANSFORMER
	DUPLEX FLOOR MTD ISO GRD	L	DISCONNECT SWITCH
Ö	DUPLEX SPECIAL LOCATION		TELEPHONE BOARD
 	QUADPLEX RECEPTACLE		ELECTRICAL PANEL
	QUADPLEX FLOOR MOUNTED	KVA	TRANSFORMER
#	QUADPLEX ISOLATED GROUND	√_	TIME CLOCK
	QUADPLEX FLOOR MTD ISO GRD	4	LIGHTING CONTACTOR
#	QUADPLEX SPECIAL LOCATION	\$	WALL SWITCH
\bigcirc	SPECIAL VOLTAGE OR AMPERAGE	OS	OCCUPANCY WALL SWITCH
Ф	SPECIAL VOLTAGE OR AMPERAGE	<u>(S</u>	OCCUPANCY CEILING SENSOR
	MULTI-OUTLET PLUGMOLD		CIRCUIT HOME RUN
▼	TELEPHONE OUTLET		CONDUIT THRU/BELOW FLOOR
J	JUNCTION BOX	←	CONDUIT STUBBED UP/DOWN
D	DATA OUTLET	N.L.	NIGHT LIGHT

	DISCREPANCIES OR CONFLICT IN INTENT IN ACCOMPLISHING WORK PRIOR TO AWARD OF CONTRACT OR IT WILL BE ASSUMED ALL NECESSARY WORK AND COSTS ARE INCLUDED. NO CHANGE ORDERS WILL BE ACCEPTED AFTER START OF WORK UNLESS DUE TO HIDDEN CONDITIONS OR CHANGES DIRECTED BY TENANT REPRESENTATIVE.
N TRANS DRMER	THE CONTRACTOR PRIOR TO BID, SHALL CHECK AND VERIFY ALL CEILING HEIGHTS, SLAB HEIGHTS/CONDITIONS FOR CLEARANCES AND INSTALLATION METHODS. HEIGHTS AND LOCATIONS OF ALL CONDUIT, JUNCTION BOXES, AND IN FLOOR INSTALLATIONS TO BE COORDINATED WITH OTHER TRADES PRIOR TO ROUGH—INS AND FINAL INSTALLS.
TRIMER	ALL CONDUITS ARE TO BE CONCEALED IN WALLS AND OR TIGHT TO STRUCTURE ABOVE. CONDUITS IN EXPOSED CEILING AREAS SHALL EXIT WALLS AS CLOSE TO ROOF/FLOOR STRUCTURAL DECK AS POSSIBLE.
	ANY EXISTING MATERIALS OR EQUIPMENT NOT TO BE REUSED MUST BE COMPLETELY REMOVED AND DISPOSED OF PROPERLY. NO EQUIPMENT OR COMPONENTS MAY BE ABANDONED IN PLACE.
	ANY PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE APPROPRIATELY FIRE STOPPED TO RETAIN THE WALL'S RATING.
CH	CONTRACTOR SHALL ENSURE LOADS BETWEEN PHASES ON PANEL BOARDS ARE BALANCED WITHIN 10%.
ENSOR	CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW VOLTAGE WIRING IN CEILING PLENUM (INCLUDING TELEPHONE. DATA, ALARM AND TEMP. CONTROL WIRING) SHALL BE UL LISTED TEFLON PLENUM RATED. ALL CABLES MUST
FLOOR /DOWN	BE SECURED TO THE STRUCTURE ABOVE, DO NOT LAY CABLES ON THE CEILING GRID. ALL LOW VOLTAGE WIRING MUST BE IN CONDUIT WHEN RUNNING THRU OR DOWN WALLS FOR PROTECTION AND EASE OF PULLING NEW WIRING. G.C. IS RESPONSIBLE TO CONFIRM WHETHER THE LOCAL CITY

THE SPACE.

	AWARD OF CONTRACT OR IT WILL BE ASSUMED ALL NECESSARY WORK AND COSTS ARE INCLUDED. NO CHANGE ORDERS WILL BE ACCEPTED AFTER START OF WORK UNLESS DUE TO HIDDEN CONDITIONS OR CHANGES DIRECTED BY TENANT REPRESENTATIVE.
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	CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW VOLTAGE WIRING IN CEILING PLENUM (INCLUDING TELEPHONE. DATA, ALARM AND TEMP. CONTROL WIRING) SHALL BE UL LISTED TEFLON PLENUM RATED. ALL CABLES MUST BE SECURED TO THE STRUCTURE ABOVE, DO NOT LAY CABLES ON THE CEILING GRID. ALL LOW VOLTAGE WIRING MUST BE IN CONDUIT WHEN RUNNING THRU OR DOWN WALLS FOR PROTECTION AND EASE OF PULLING

CODE REQUIRES LOW VOLTAGE TO BE INSTALLED IN CONDUIT THROUGHOUT

RESPONSIBILITY/GENERAL NOTES

ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND SHALL IMMEDIATELY NOTIFY THE OWNER'S PROJECT MANAGER OF ANY

LIGHT FIXTURE SCHEDULE											LAMP SCHEDULE				
QTY.	SYMBOL	TYPE	MANUFACTURER	CATALOG NO.	DESCRIPTION	REF NOTES	VOLTS	REC	SUR	PEN	WAL	LAMP/ FIXT	WATTS/ LAMP	FIXTURE WATTS	MANUFACTURER/ CATALOG NO.
4		А	IVP	BB-SI-WA-LT	DECORATIVE PENDANT MOUNT BASKET	1,2,3	120			Χ		1	40	40	TBD
252		C1	JUNO	T1056L-30K-80CRI- PDIM-NAT-CPL	LED WALL WASH	1,2,3	120		Х			1	38	38	INCLUDED
8	오	D2	HI-LITE	H-LCGU-1B-117-FR/ GU24-26W RATED	LED SAUCER VAPOR JAR FITTING ROOM LIGHT	1,2,3	120		Х			1	10	10 (MAX 26w RATED)	TCP LED10A19GUDOD30K
8	0	E1	JUNO	TC22LED-G4-14LM-30K 90CRI-MVOLTZT10 27 PTSC-LB27	6" LED DOWNLIGHT	1,2,3,5	120	×				1	16	16	INCLUDED
6		F1	ORACLE	14-OT-LED-4000L-DIM10 -MVOLT-40K-85-A12-14FK	1X4 LED RECESSED TROFFER	1,2,3,4,5	UNIV	Х				1	37	37	INCLUDED
1		F2	ORACLE	24-OT-LED-5000L- DIM10-MVOLT-40K-85-A12	2X4 LED RECESSED TROFFER	1,2,3,4,5	UNIV	X				1	36	36	INCLUDED
2		F4	ORACLE	4-OC-2-32-T8 MVOLT	4' T8 FLUORESCENT STRIP FOR EM USE EMG-T8-BX-700	1,2,3,4,5	UNIV		Х			2	28	54	PHILLIPS 28103 F32T8/ADV841 EW ALTO
5		F8	ORACLE	8-OC-4-32-T8 MVOLT	8' T8 FLUORESCENT STRIP FOR EM USE EMG-T8-BX-1400	1,2,3,4,5	UNIV		Х			4	28	104	PHILLIPS 28103 F32T8/ADV841 EW ALTO
136	∇	G	JUNO	T254L-G2-30K-80CRI- PDIM-NFL-NAT	LED TRACK HEAD	1,2,3	120		Х			1	15	15	INCLUDED
5	0	Н	AQLIGHTING	AQ-PENST-1464 	12 INCH COMMERCIAL PENDANT	1,2,3	120			X		1	60	60	TBD
68	-	J	JUNO	R38SL	LIVE END POWER FEED TRACK ACCESSORY	1,2	120			X		NOT APPLICABLE			
111	*	К	JUNO	R23SL	MINIATURE CONNECTOR TRACK ACCESSORY	1,2	120			Х		NOT APPLICABLE			
8		T2W	JUNO	R2FTSL 	2' SILVER TRACK	1,2,3	120		Х				NOT APPLICABLE		
2		T4W	JUNO	R4FTSL 	4' SILVER TRACK	1,2,3	120		Х					NOT APPL	ICABLE -
2		T6W	JUNO	R6FTSL 	6' SILVER TRACK	1,2,3	120		Х					NOT APPL	ICABLE -
167		T8W	JUNO	R8FTSL 	8' SILVER TRACK	1,2,3	120		Х				NOT APPLICABLE		
1		EM1	MAXILUME	ELM-LED-803-W	WALL MOUNTED EMERGENCY LIGHT W/90 MIN BATTERY BACKUR	1,2,3,4,5	UNIV		Х					5	INCLUDED
24		EM2	BEGHELLI TEMPESTA	TA-LED-ECO- SE-UNV-AT	LED EMERG. LIGHT CEILING MTD W/90 MIN BATTERY BACKUP	1,2,3,4,5	UNIV	Х				1	6	6	INCLUDED
1	⊗	EX1	ELITE	ELX-603-R-W 	EXIT SIGN WITH RED LETTERS W/90 MIN BATTERY BACKUP	1,2,3,4,5	UNIV		Х					2	INCLUDED
2	8	EX3	MAXILUME	ELX-629-R-W-G2 	EXIT SIGN W/90 MIN BATTERY BACKUP AND REMOTE CAPABILITY	1,2,3,4,5	UNIV		Х					5	INCLUDED
2	4	XT	MAXILUME	ELM-LED-863-OT-G	WEATHERPROOF EXTERIOR REMOTE HEAD	1,2,3,4,5	UNIV		Х			2	2		INCLUDED

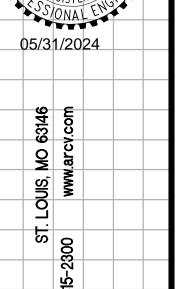
INSTALLATION OF LIGHTING FIXTURES SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND ACCORDING TO CODE REQUIREMENTS.

. ALL EMERGENCY LIGHTING AND EXIT SIGNAGE SHALL BE PROVIDED WITH 90 MINUTE BATTERY BACK-UP.

EC SHALL VERIFY ALL MOUNTING HEIGHTS WITH ARCHITECTURAL PLANS, COORDINATE ANY DISCREPANCIES WITH ARCHITECTURAL SHEETS AND OWNER.

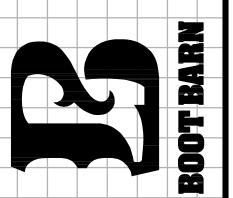
ALL NEW LIGHTING FIXTURES, LAMP, AND BALLAST ARE FURNISHED BY BOOTBARN AND INSTALLED BY ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

5. FIXTURES SHOWN WITH CROSS-HATCH ARE TO BE NIGHT LIGHTS, FIXTURES USED FOR EXIT, EMERGENCY, OR NIGHT LIGHTING TO BE ON LOCKOUT CIRCUIT



9

City of Puyallup Development & Permitting Services



STORE

E30

1. GENERAL REQUIREMENTS

THE GENERAL PROVISIONS OF THE CONTRACT INCLUDING ANY GENERAL AND SUPPLEMENTAL CONDITIONS AND GENERAL REQUIREMENTS APPLY TO THE WORK IN THIS SECTION. BEFORE SUBMITTING A BID, EXAMINE ALL MECHANICAL, ARCHITECTURAL, AND/OR STRUCTURAL DOCUMENTS, VISIT THE SITE AND GET ACQUAINTED WITH ALL CONDITIONS THAT MAY IN ANY WAY WHATSOEVER AFFECT THE EXECUTION OF THIS CONTRACT. TAKE MEASUREMENTS AND BE RESPONSIBLE FOR EXACT SIZE AND LOCATIONS OF ALL OPENINGS REQUIRED FOR THE INSTALLATION OF WORK. FIGURED DIMENSIONS ARE REASONABLY ACCURATE AND SHOULD GOVERN IN SETTING OUT WORK. WHERE DETAILED METHOD OF INSTALLATION IS NOT INDICATED OR WHERE VARIATIONS EXIST BETWEEN DESCRIBED WORK AND APPROVED PRACTICE, DIRECTION OF THE OWNER'S REPRESENTATIVE ON JOB SITE SHALL BE FOLLOWED.

THE CONTRACT INCLUDES ALL ITEMS OF MATERIAL AND LABOR REQUIRED FOR THE COMPLETE INSTALLATION AND FULL OPERATION OF THE ELECTRICAL WORK AS SHOWN ON THE DRAWINGS AND HEREINAFTER SPECIFIED. ALL WORK, MATERIALS, AND EQUIPMENT SHALL HAVE A ONE YEAR WARRANTY AFTER ACCEPTANCE OF THE WORK BY THE OWNER. ANY DEFECTIVE ITEMS SHALL BE REMOVED AND REPLACED AT THE ELECTRICAL SUB—CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

PERFORM WORK UNDER THIS CONTRACT IN CLOSE HARMONY WITH OTHER CONTRACTORS SO COMPLETED WORK SHALL PRESENT A NEAT AND WORKMANLIKE INSTALLATION. EXPOSED FINISHED MATERIALS AND EQUIPMENT SHALL BE CAREFULLY CLEANED AND WIPED TO REMOVE GREASE, SMUDGES, DUST AND OTHER SPOTS AND LEFT SMOOTH AND CLEAN. DURING THE PROGRESS OF THE WORK, THE ELECTRICAL SUB—CONTRACTOR SHALL CAREFULLY CLEAN UP AFTER HIS MEN AND SHALL LEAVE THE PREMISES AND ALL PORTIONS OF THE BUILDING IN WHICH HE IS WORKING FREE OF DEBRIS AND IN A CLEAN AND SAFE CONDITION.

TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR EQUIPMENT CONNECTORS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT INDICATED, TIGHTEN CONNECTORS AND TERMINALS TO COMPLY WITH TIGHTENING TORQUES SPECIFIED IN APPLICABLE UL AND NEC STANDARDS.

WHENEVER THE WORDS "CONTRACTOR", "THIS CONTRACTOR", ETC. APPEAR ON DRAWINGS OR IN THESE SPECIFICATIONS FOR THE ELECTRICAL WORK, IT SHALL REFER TO THE ELECTRICAL SUB—CONTRACTOR. WHENEVER THE WORD "PROVIDE" APPEARS IN THESE DOCUMENTS, IT SHALL BE INTERPRETED TO MEAN "FURNISH & INSTALL".

OUTLET MOUNTING HEIGHTS AS INDICATED ON THE PLANS ARE APPROXIMATE TO BE USED FOR BIDDING PURPOSES ONLY. THE EXACT MOUNTING HEIGHT OF OUTLETS SHALL BE DETERMINED IN THE FIELD WITH RELATION TO ARCHITECTURAL DETAILS AND EQUIPMENT BEING SERVED. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE OUTLET LOCATION WITH EQUIPMENT. THE OWNER'S REPRESENTATIVE SHALL BE PERMITTED TO RELOCATE ANY OUTLET PRIOR TO INSTALLATION WITHIN A 15 FOOT LIMIT AT NO ADDITIONAL CHARGE IN CONTRACT PRICE. ALL FASTENERS, HANGERS AND METHODS OF HANGING EXPOSED WORK IN FINISHED AREAS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE INSTALLATION. IF DURING CONSTRUCTION IF BECOMES APPARENT THAT CERTAIN MINOR CHANGES IN LAYOUT WILL EFFECT A NEATER JOB OR BETTER ARRANGEMENT, SUCH ALTERATIONS SHALL BE MADE AS PART OF THE CONTRACT. ENGINEER'S APPROVAL SHALL BE OBTAINED BEFORE MAKING SUCH CHANGES. WORKMANSHIP THROUGHOUT SHALL CONFORM TO THE STANDARDS OF BEST PRACTICE. MARKS, DENTS OR FINISH SCRATCHES WILL NOT BE PERMITTED ON ANY EXPOSED MATERIALS, FIXTURES OR FITTINGS. INSIDE OF PANELS & EQUIPMENT BOXES SHALL BE LEFT CLEAN.

THE SYSTEM SHALL RING ENTIRELY FREE FROM GROUND WHEN TESTED OUT IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTRUCTION OF EACH SYSTEM TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. UPON COMPLETION OF THE JOB, THIS CONTRACTOR SHALL FURNISH THE OWNER WITH A COMPLETE SET OF OPERATING INSTRUCTIONS ON ALL ELECTRICAL SYSTEMS INSTALLED.

THE ELECTRICAL CONTRACTOR SHALL CONSULT THE PLANS OF ALL OTHER TRADES IN ALL INSTANCES BEFORE INSTALLING HIS WORK SO THAT HIS PIPING WILL NOT INTERFERE WITH THOSE BRANCHES. IN THE EVENT OF A CONFLICT, THIS CONTRACTOR SHALL REPORT TO THE OWNER'S REPRESENTATIVE AT ONCE AND DO NO FURTHER WORK TO BE INSTALLED UNTIL A SATISFACTORY ARRANGEMENT IS DECIDED UPON. ANY WORK DONE, OR EQUIPMENT PLACED IN POSITION BY THIS CONTRACTOR, CREATING A CONFLICT IN VIOLATION HEREOF, SHALL BE READJUSTED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE EXPENSE OF THE CONTRACTOR. THE DECISION OF THE OWNER'S REPRESENTATIVE SHALL BE FINAL IN REGARD TO CHANGES DUE TO CONFLICTING CONDITIONS.

2. SHOP DRAWINGS

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS <u>ONLY</u> FOR ITEMS OF MATERIAL AND EQUIPMENT DIFFERENT THEN THOSE ALREADY CALLED FOR WITHIN THESE DRAWINGS FOR APPROVAL BY THE ENGINEER. THE CONTRACTOR IS NOT AUTHORIZED TO PURCHASE ANY MATERIAL UNTIL SUCH APPROVAL IS OBTAINED. A MINIMUM OF SIX SEPARATE SETS OF DRAWINGS IS REQUIRED AND WILL BE DISTRIBUTED AS FOLLOWS: 1 COPY FOR ENGINEER'S FILE; 1 COPY FOR ARCHITECT'S FILE; 2 COPIES FOR THE OWNER'S FILE; 2 COPIES FOR THE OWNER'S FILE; 2 COPIES FOR THE CONTRACTOR. SHOP DRAWINGS SHALL BE NEATLY BOUND IN A FLAT RING BINDER HAVING JOB NAME AND CONTRACTOR'S NAME ON COVER. A SINGLE SUBMISSION IS PREFERRED HAVING ALL ITEMS INCLUDED. LOOSE SHEET OR INCOMPLETE SUBMITTALS WILL NOT BE ACCEPTED. ALL ITEMS OF MATERIAL TO BE SUPPLIED WHICH DO NOT REQUIRE SHOP DRAWING SUBMISSION SUCH AS CONDUIT, WIRE, BOXES, ETC., SHALL BE LISTED AS SEPARATE MATERIAL SHOWING MANUFACTURER'S NAME AND CATALOG NUMBER AND TYPE AND SHALL BE INCLUDED WITH SHOP DRAWINGS SUBMITTAL.

3. RECORD DRAWINGS AND OPERATING INSTRUCTIONS & SERVICE MANUAL

TWO SETS OF MECHANICAL/ELECTRICAL DRAWINGS SHALL BE PROVIDED AS RECORD DRAWINGS WHICH SHALL BE SEPARATE, CLEAN, SEPIA REPRODUCIBLES RESERVED FOR THE PURPOSE OF SHOWING A COMPLETE PICTURE OF THE WORK AS ACTUALLY INSTALLED. THESE DRAWINGS SHALL ALSO SERVE AS WORK PROGRESS REPORT SHEETS AND THE ELECTRICAL SUB—CONTRACTOR SHALL MAKE ANY NOTATIONS, NEAT AND LEGIBLE THEREON DAILY AS WORK PROCEEDS. THE DRAWINGS SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES AND SHALL BE KEPT AT THE JOB AT A LOCATION DESIGNATED BY THE OWNER'S REPRESENTATIVE. AT THE COMPLETION OF THE WORK, THESE RECORD DRAWINGS SHALL BE SIGNED BY THE ELECTRICAL SUB—CONTRACTOR, DATED AND RETURNED TO THE OWNER'S REPRESENTATIVE. FINAL PAYMENT OF CONTRACT WILL NOT BE MADE UNTIL RECEIPT AND REVIEW OF SAID DRAWINGS. PROVIDE TWO NEATLY BOUND (WITH TABBED SECTIONS) COPIES OF MAINTENANCE AND INSTRUCTION BOOKS, PARTS LIST PERTAINING TO ALL EQUIPMENT FURNISHED. SUBMIT TO THE OWNER'S REPRESENTATIVE FOR APPROVAL. FINAL PAYMENT WILL NOT BE MADE UNTIL DRAWINGS FOR RECORD, MAINTENANCE AND INSTRUCTION MANUALS ARE DELIVERED TO THE OWNER'S REPRESENTATIVE.

4. PERMITS AND REGULATIONS

THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE SHALL BE THE MINIMUM REQUIREMENT FOR ALL WORK. ALL ELECTRICAL MATERIALS USED IN THIS WORK AND ALL WORKMANSHIP AND TESTS PERFORMED THEREIN, UNLESS SPECIFICALLY SPECIFIED SHALL CONFORM TO THE LATEST RULES AND REGULATIONS AND SPECIFICATIONS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, LOCAL AND STATE CODES AND AUTHORITIES HAVING JURISDICTION AND UTILITY COMPANY. EXAMINE THE DRAWINGS AND SPECIFICATIONS FOR COMPLIANCE WITH PREVAILING CODES, REGULATIONS AND ORDINANCES AND BASE BID AND WORK ACCORDINGLY. ANY MINOR DISCREPANCY BETWEEN THESE DRAWINGS/SPECIFICATIONS AND CODES, LAWS, ORDINANCES, RULES AND REGULATIONS SHALL BE CORRECTED BY THIS CONTRACTOR AS REQUIRED WITHOUT ANY ADDITIONAL REIMBURSEMENT. MAJOR DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER (IN WRITING), PRIOR TO INSTALLATION, ALONG WITH THE CONTRACTOR'S PROPOSED COST FOR CORRECTION. THIS CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS OR CERTIFICATES OF INSPECTION AND APPROVAL REQUIRED FOR THIS BRANCH OF THE WORK. OWNER SHALL BE FURNISHED WITH CERTIFICATES OF FINAL INSPECTION AND APPROVAL PRIOR TO FINAL ACCEPTANCE OF THIS BRANCH OF THE

5. DRAWINGS AND SPECIFICATIONS

THE SPECIFICATIONS AND ACCOMPANYING DRAWINGS ARE INTENDED TO DESCRIBE THE SCOPE OF ALL ELECTRIC/MECHANICAL WORK. THE DRAWINGS ARE AN OUTLINE TO INDICATE THE APPROXIMATE LOCATION AND ARRANGEMENT OF RACEWAYS, WIRING AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE IN EXECUTING OF THE WORK. SHOULD THERE BE A CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS, THIS CONTRACTOR SHALL REFER THE MATTER TO THE OWNER'S REPRESENTATIVE FOR A DECISION AS TO METHOD OR MATERIAL. ELECTRICAL CONTRACTOR SHALL REFER TO DRAWINGS OF ALL OTHER TRADES FOR DETAILS, DIMENSIONS AND LOCATIONS OF OTHER WORK AND ROUTE HIS WORK SO AS NOT TO CONFLICT WITH ANY OTHER BRANCH. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING QUANTITIES OF EQUIPMENT MENTIONED IN THE SPECIFICATIONS WITH THOSE SHOWN ON THE DRAWINGS. IF DISCREPANCIES ARE NOTED, PROVIDE THE GREATER OF THE QUANTITIES OR THE BETTER OF THE QUALITIES AS APPLICABLE.

6. MATERIALS AND EQUIPMENT

ALL MATERIALS AND EQUIPMENT SHALL BE NEW. ALL MATERIALS, APPARATUS AND EQUIPMENT SHALL BEAR THE UNDERWRITER'S LABORATORIES INC., LABEL WHERE REGULARLY SUPPLIED. CERTAIN MANUFACTURERS OF MATERIAL AND EQUIPMENT ARE SPECIFIED AND PLANS ARE DETAILED ACCORDING TO THIS MATERIAL. THIS CONTRACTOR SHALL BASE HIS BID ON FURNISHING AND INSTALLING THIS MAKE OF MATERIAL AND EQUIPMENT. WHERE MORE THAN ONE MAKE OF MATERIAL OR EQUIPMENT IS SPECIFIED, THE CONTRACTOR SHALL STATE IN HIS BID WHICH MAKE HE PROPOSES TO FURNISH.

7. ELECTRICAL IDENTIFICATION

PROVIDE MANUFACTURER'S STANDARD SELF-ADHESIVE VINYL TAPE NOT LESS THAN 3 MILS THICK BY 1-1/2" WIDE. WHERE APPLICABLE, INSTALL ON ALL CONCEALED RACEWAYS AT CONNECTION TO ALL JUNCTION BOXES, PULL BOXES, EQUIPMENT, WALL/FLOOR/, ETC. UNLESS OTHERWISE INDICATED OR REQUIRED BY GOVERNING REGULATIONS, PROVIDE ORANGE TAPE WITH BLACK LETTERS.

PROVIDE CIRCUIT IDENTIFICATION BANDS FOR ALL CABLES AND CONDUCTORS. PROVIDE MANUFACTURER'S STANDARD COLOR CODING FOR CABLE/CONDUCTOR JACKET AND/OR INSULATION FOR ALL CABLES AND CONDUCTORS OF ALL SYSTEMS. MATCH IDENTIFICATION WITH MARKING SYSTEM USED IN EXISTING SYSTEMS (WHERE APPLICABLE), SHOP DRAWINGS, CONTRACT DOCUMENTS, AND SIMILAR PREVIOUSLY ESTABLISHED IDENTIFICATION FOR PROJECT'S ELECTRICAL WORK. PROVIDE ON ALL CONDUCTORS OF ALL SYSTEMS.

INSTALL ENGRAVED PLASTIC—LAMINATE SIGN ON MAJOR UNITS OF ELECTRICAL EQUIPMENT, INCLUDING CENTRAL OR MASTER UNIT OF EACH ELECTRICAL SYSTEM INCLUDING COMMUNICATION/CONTROL/SIGNAL SYSTEMS, UNLESS UNIT IS SPECIFIED WITH ITS OWN SELF—EXPLANATORY IDENTIFICATION OR SIGNAL SYSTEM. EXCEPT AS OTHERWISE INDICATED, PROVIDE SINGLE LINE OF TEXT, 1/2" HIGH LETTERING, ON 1–1/2" HIGH SIGN (2" HIGH WHERE 2 LINES ARE REQUIRED), WHITE LETTERING IN BLACK FIELD. UNLESS DETERMINED OTHERWISE IN FIELD, PROVIDE TEXT MATCHING TERMINOLOGY AND NUMBERING OF THE CONTRACT DOCUMENTS AND SHOP DRAWINGS. SECURE TO SUBSTRATE WITH FASTENERS, EXCEPT USE ADHESIVE WHERE FASTENERS SHOULD NOT OR CANNOT PENETRATE SUBSTRATE. AS A MINIMUM PROVIDE SIGNS FOR EACH UNIT OF THE FOLLOWING CATEGORIES OF ELECTRICAL WORK WHERE SUCH WORK EXISTS ON THE PROJECT ALL STARTERS AND DISCONNECTS; ALL REMOTE FIXTURE OR EQUIPMENT SWITCHING DEVICES (VIA ENGRAVED WALLPLATES); ALL SYSTEM DEVICES, PORTS, TAPS, J.B.'S, P.B.S, ETC.; PANELBOARDS, ELECTRICAL CABINETS; ANY OTHER EQUIPMENT DESIGNATED BY OWNER OR ENGINEER IN FIELD.

ALL EQUIPMENT & SYSTEM IDENTIFICATION NOMENCLATURE SHOWN ON DRAWINGS OR LISTED HEREIN IS SHOWN FOR GENERAL DESIGN AND INSTALLATION REFERENCE ONLY. THE ACTUAL NAMEPLATE, ETC. NOMENCLATURE FOR THIS PROJECT SHALL BE VERIFIED BY ELECTRICAL CONTRACTOR IN FIELD PRIOR TO FABRICATION AND WHERE APPLICABLE, SHALL BE AN EXTENSION OF EXISTING NOMENCLATURE USED ON THE SITE AS DETERMINED IN FIELD BY ELECTRICAL CONTRACTOR.

IN ADDITION TO THE ABOVE, ALL LABELING FOR ALL ELECTRICAL WIRING WORK (FOR ALL SYSTEMS) SHALL BE 3M DCI NO. 054007—11954 "SWD" WRITE—ON TAPE DISPENSER KIT WITH FACTORY PROVIDED SPECIAL FAST DRYING MARKER INCLUDED WITH KIT. ALL MARKINGS SHALL BE CLEAR AND LEGIBLE.

AS DETERMINED IN FIELD, PROVIDE COLOR CODING FOR JUNCTION BOXES, PULL BOXES AND ASSOCIATED PLATES TO MATCH EXISTING BUILDING STANDARDS. THE FOLLOWING INSULATION COLOR CODE SHALL BE USED FOR SYSTEM AND VOLTAGE IDENTIFICATION FOR FEEDER AND BRANCH CIRCUIT WIRING.

277/480V SYSTEM — BROWN, ORANGE, YELLOW & GRAY (NEUTRAL)
120/208V SYSTEM — BLACK, RED, BLUE & GRAY (NEUTRAL)

EQUIPMENT GROUNDING — GREEN SYSTEMS — TO MATCH EXISTING — VERIFY IN FIELD.

ALL METALLIC CONDUIT, SURFACE WIREWAYS, SUPPORTS, CABINET AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE LATEST ISSUE OF THE NATIONAL ELECTRICAL CODE AND AS SHOWN ON PLANS. THE GROUND TERMINALS OF RECEPTACLES SHALL BE CONNECTED TO THE EQUIPMENT GROUND BUS OF THE SOURCE BRANCH CIRCUIT PANELBOARD. ALL GROUNDING CONDUCTORS SHALL BE PROTECTED FROM MECHANICAL INJURY. ALL CONNECTIONS TO EQUIPMENT OR CONDUIT SHALL BE MADE WITH AN APPROVED CONDUCTOR AND SAME SHALL BE BOLTED OR CLAMPED TO EQUIPMENT AND CONDUIT. ALL CONTACT SURFACES SHALL BE THOROUGHLY CLEANED AND BRIGHT BEFORE CONNECTIONS TO INSURE A GOOD METAL CONTACT.

ALL NEW FEEDERS AND BRANCH CIRCUITING INSTALLED UNDER THIS CONTRACT SHALL BE PROVIDED WITH EQUIPMENT GROUNDING CONDUCTORS SIZED AND INSTALLED IN ACCORDANCE WITH LATEST ISSUE OF THE NATIONAL ELECTRICAL CODE ARTICLE 250 AND AS SHOWN ON PLANS.

9. CONDUIT AND FITTINGS

ALL WIRING FOR DIFFERENT POWER VOLTAGES SHALL BE INSTALLED IN RACEWAY SYSTEMS SEPARATE FROM EACH OTHER (I.E. 24V SEPARATE FROM 120/208V). ONLY VOICE AND DATA CABLES MAY SHARE RACEWAYS.

ALL WIRING SHALL BE RUN IN CONDUIT. THIN WALL EMT CONDUIT SHALL BE USED, SIZES 3/4" (MINIMUM) THROUGH 2-1/2". ALL CONDUITS LARGER THAN 2-1/2" SHALL BE HEAVYWALL. CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SLABS SHALL BE PVC JACKETED FLEXIBLE STEEL CONDUIT. SEALTITE SHALL BE USED IN WET AREAS AND ON ALL MOTORIZED EQUIPMENT. FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTIONS. NO BX, ROMEX, ARMORED CABLE, ETC. SHALL BE ALLOWED. ALL VISIBLE CONDUIT SHALL BE RIGID. ALL FITTINGS FOR SAME SHALL BE SET SCREW TYPE STEEL, WITH INSULATED THROATS. ALL WIRING OF ALL SYSTEMS SHALL BE INSTALLED IN CONDUIT UNLESS SPECIFICALLY INDICATED OTHERWISE HEREIN OR ON

EXPOSED CONDUIT SHALL BE SECURELY SUPPORTED IN PLACE PER CODE BUT ON A MAXIMUM OF 10 FOOT INTERVALS, WITHIN THREE FEET OF EACH BEND, AT EVERY OUTLET OR JUNCTION BOX AND AT THE END OF EACH STRAIGHT RUN TERMINATING AT A BOX OR CABINET. CONDUIT SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPE WORK. CONDUITS SHALL BE RUN PARALLEL TO AND AT RIGHT ANGLES TO THE BUILDING LINES. GENERALLY, CONDUIT SHALL BE RUN IN CONTACT WITH STRUCTURAL PARTS OF THE BUILDING SO AS TO AVOID SUSPENDED LENGTHS OF CONDUIT. CONDUIT SHALL BE INSTALLED AS TO BE ACCESSIBLE

FOR REPLACEMENT AND MAINTENANCE AND GENERALLY, CONDUIT SHALL BE INSTALLED TO PERMIT DRAINAGE.

CONDUIT RUNS EXCEEDING 100 FEET IN LENGTH OR HAVING IN EXCESS OF THREE 90 DEGREE TURNS SHALL BE PROVIDED WITH PULL BOXES. CONDUIT FILL SHALL NOT EXCEED 30 PERCENT. ALL CONDUIT SYSTEMS (INCLUDING J.B.'S, P.B.'S, ETC.) SHALL BE PERMANENTLY IDENTIFIED. NEW BRANCH CIRCUIT HOME-RUN CONDUITS SHALL BE NO LARGER THAN 1-1/4" DIAMETER. CONDUIT FILL SHALL NOT EXCEED NEC REQUIREMENTS.

CONDUIT SHALL BE CLEANED INSIDE BEFORE ANY WIRES ARE PULLED. CONDUIT ENDS SHALL BE CAPPED AND PLUGGED WITH STANDARD ACCESSORIES AS SOON AS CONDUIT HAS BEEN PERMANENTLY INSTALLED. CONDUIT INSTALLED WITHOUT CONDUCTORS SHALL BE PROVIDED WITH SWEEP BENDS AND BALING WIRE FOR PULLING.

ALL JOINTS SHALL BE MADE TIGHT WITH WATERTIGHT COUPLINGS MATCHING CONDUIT AND ALL CORNERS SHALL BE MAKE WITH LONG RADIUS. THE ENDS OF ALL CONDUITS SHALL BE CUIT SOLVARE AND REAMED AND ALL JOINTS BROUGHT TO A SHOULDER

ALL JOINTS SHALL BE MADE TIGHT WITH WATERTIGHT COUPLINGS MATCHING CONDUIT AND ALL CORNERS SHALL BE MAKE WITH LONG RADIUS. THE ENDS OF ALL CONDUITS SHALL BE CUT SQUARE AND REAMED AND ALL JOINTS BROUGHT TO A SHOULDER. CONDUIT SHALL BE CONTINUOUS BETWEEN OUTLETS TO MAKE A COMPLETE INSTALLATION AND TO EFFECT A CONTINUOUS GROUND. SUITABLE SUPPORTS AND FASTENING SHALL BE PROVIDED FOR CONDUIT.

CONDUIT SHALL BE SUPPORTED BY APPROVED STRAPS, FASTENERS AND HANGERS. HANGERS SHALL BE SUSPENDED FROM RODS. PERFORATED STRAPS WILL NOT BE ACCEPTABLE. FASTENERS SHALL BE LEAD EXPANSION SHIELDS IN BLOCK OR CONCRETE, TOGGLE BOLTS IN HOLLOW WALLS, MACHINE SCREWS ON METAL SURFACES AND WOOD SCREWS ON WOOD CONSTRUCTION. ALL CONDUIT SHALL BE SUPPORTED INDEPENDENTLY FROM ALL OTHER BUILDING SYSTEMS AND SHALL BE SUPPORTED DIRECTLY FROM STRUCTURAL COMPONENTS.

PROVIDE SLEEVES FOR ALL FIRE WALL AND SMOKE PARTITION PENETRATIONS (SEALED ACCORDINGLY). ALL RACEWAYS SHALL BE ENTIRELY FREE OF PLASTER, MORTAR, WATER AND OTHER FOREIGN MATTER. RACEWAYS INSTALLED UNDER THIS CONTRACT WITHOUT CONDUCTORS SHALL HAVE BALING WIRE LEFT IN RACEWAYS FROM OUTLET TO OUTLET FOR FUTURE PULLING OF CONDUCTORS. RACEWAYS OPEN ENDS SHALL BE PLUGGED OR CAPPED IN AN APPROVED MANNER.

WHERE "FISHING" THROUGH EXISTING HOLLOW PARTITIONS IS MANDATORY, USE MINIMUM 3/4" "GREENFIELD" (STEEL) FOR LOW VOLTAGE CABLING AND METAL—CLAD/ARMORED CABLE (LISTED FOR USE IN HEALTH CARE FACILITIES) FOR POWER. OTHERWISE

TYPE MC/AC CABLE MAY ONLY BE USED FOR 6' FIXTURE WHIPS, UNLESS CASE—BY—CASE PERMISSION IS GRANTED BY ENGINEER AND OWNER.

10. METHOD OF WIRING — POWER

A GROUNDED CONDUCTOR (NEUTRAL) SHALL BE INSTALLED WITHIN EACH JBOX INTENDED FOR THE INSTALLATION OF A LIGHTING CONTROL DEVICE (TOGGLE SWITCH, DIMMER, OCCUPANCY SENSOR, PHOTOCELL, ETC). CURRENT OR FUTURE DEVICES MAY REQUIRE LINE—TO—NEUTRAL VOLTAGE TO OPERATE THE ELECTRONICS OF THE DEVICE IN STANDBY MODE. ELECTRONIC CONTROL DEVICES SHALL NOT INTRODUCE CURRENT ON THE EQUIPMENT GROUNDING CONDUCTOR DURING NORMAL OPERATION.

IT IS PREFERRED A SEPARATE NEUTRAL BE USED WHEN POSSIBLE. PER THE NEC, IF A NEUTRAL IS SHARED, ALL UNGROUNDED CONDUCTORS OF A MULTIWIRE BRANCH CIRCUIT MUST BE SIMULTANEOUSLY DISCONNECTED TO REDUCE THE RISK OF SHOCK TO PERSONNEL WORKING ON EQUIPMENT SUPPLIED BY A MULTIWIRE BRANCH CIRCUIT. FOR A SINGLE PHASE INSTALLATION, THE SIMULTANEOUS DISCONNECTION CAN BE ACHIEVED BY TWO SINGLE POLE CIRCUIT BREAKERS WITH AN IDENTIFIED HANDLE TIE OR BY A 2-POLE SWITCH OR CIRCUIT BREAKER. FOR A 3-PHASE INSTALLATION, A 3-POLE CIRCUIT BREAKER OR THREE SINGLE POLE CIRCUIT BREAKERS WITH AN IDENTIFIED HANDLE TIE PROVIDES THE REQUIRED SIMULTANEOUS DISCONNECTION OF THE UNGROUNDED CONDUCTORS. WHERE FUSES ARE USED FOR BRANCH CIRCUIT OVERCURRENT PROTECTION, A 2-POLE OR 3-POLE SWITCH AS DECLURED.

NEATLY DRESS ALL WORK. INSTALL ALL WORK PARALLEL AND PERPENDICULAR TO SURFACES OR EXPOSED STRUCTURAL MEMBERS, AND FOLLOW SURFACE CONTOURS, WHERE POSSIBLE. KEEP CONDUCTOR SPLICES TO MINIMUM. INSTALL SPLICE AND TAP CONNECTORS WHICH POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATING THAN CONDUCTORS BEING SPLICED. USE SPLICE AND TAP CONNECTORS WHICH ARE COMPATIBLE WITH CONDUCTOR MATERIAL. ALL WIRES SHALL BE RUN CONTINUOUS FROM OUTLET TO OUTLET/FIXTURE TO FIXTURE. INSULATION VALUE OF JOINTS TO BE 100% IN EXCESS OF WIRE. PROVIDE ADEQUATE LENGTH OF CONDUCTORS WITHIN ELECTRICAL ENCLOSURES AND TRAIN THE CONDUCTORS TO TERMINAL POINTS WITH NO EXCESS. BUNDLE MULTIPLE CONDUCTORS, WITH CONDUCTORS LARGER THAN NO 10 AWG CABLED IN INDIVIDUAL CIRCUITS. MAKE TERMINATIONS SO THERE IS NO BARE CONDUCTOR AT THE TERMINAL.

BRANCH SUBFEEDER CIRCUITS SHALL BE INSTALLED AS SHOWN ON THE FLOOR PLANS. WHERE OUTLETS ARE INDICATED BY LETTERS ON PLANS, THEY SHALL BE CONTROLLED BY CORRESPONDING SWITCHES. NO WIRE SIZE SMALLER THAN NO. 12 SHALL BE USED FOR ANY BRANCH CIRCUIT UNLESS OTHERWISE NOTED ON PLANS FOR CONTROL CIRCUITS. LARGER SIZES SHALL BE USED WHERE REQUIRED AND/OR INDICATED ON THE PLANS. DISTANCES FROM PANEL TO FIRST OUTLET OF A 15 OR 20 AMPERE BRANCH CIRCUIT SHALL REQUIRE THE FOLLOWING MINIMUM WIRE SIZE TO THE FIRST OUTLET.

UP TO 100 FEET: #12 100 TO 200 FEET: #10 MORE THAN 200 FEET: # 8

ALL BRANCH CIRCUITS MORE THAN 200 FEET IN LENGTH SHALL BE MINIMUM NO. 10 TO THE LAST OUTLET. CONTROL CIRCUITS SHALL BE NO. 14 EXCEPT FOR RUNS EXCEEDING 300 FEET WHERE THEY SHALL BE NO. 12. OUTLETS SHALL BE LOCATED APPROXIMATELY AS SHOWN ON THE PLANS AND SHALL BE WIRED TO PROVIDE CONTROL OF OUTLETS INDICATED. ALL WIRES OF ANY ONE CIRCUIT SHALL BE RUN IN THE SAME CONDUIT.

ALL WIRES SHALL BE RUN CONTINUOUS FROM OUTLET TO OUTLET. INSULATION VALUE OF JOINTS TO BE 100% IN EXCESS OF WIRE. MECHANICAL WIRE SPLICERS SHALL BE SCOTCHLOCK INSULATED TYPE, T&B STAKON OR APPROVED EQUAL. THE CONDUCTORS TERMINATING AT EACH WIRED OUTLET SHALL BE LEFT NOT LESS THAN 8" LONG AT THEIR OUTLET FITTINGS TO FACILITATE INSTALLMENT OF DEVICES OF FIXTURES. FRICTION AND RUBBER TAPE CONFORM TO FEDERAL SPECIFICATIONS HH—T—11 AND HH—T—111. PLASTIC ELECTRICAL TAPE SHALL BE SCOTCH #33+ OR APPROVED EQUAL.

TYPE MC CABLE SHALL BE FORMED FROM CONTINUOUS LENGTH OF SPIRALLY WOUND, INTERLOCKED ZINC—COATED OR GALVANIZED (INSIDE & OUTSIDE) STRIP STEEL. ALL CONDUCTORS SHALL BE RATED FOR 90 DEG. C. MINIMUM. PROVIDE WITH FULL PARITY SIZED GREEN INSULATED EQUIPMENT GROUND CONDUCTOR. PROVIDE COMPATIBLE STEEL FITTINGS WITH INTEGRAL RED PLASTIC INSULATED THROAT BUSHINGS, COMPLIANT WITH NEC 350—5. CABLES SHALL BE 90 DEG. C. RATED WITH ALL

A) UL STD.4 AND UL STD. 83. b) ANSI E119 AND E814.

c) NEC ARTICLES 250 AND 333.

TYPE MC CABLE MAY BE UTILIZED ONLY IF NEC APPROVED AND IF APPROVED BY LOCAL AUTHORITY HAVING JURISDICTION AND IF INCLUDED IN THE LIMITED APPLICATIONS DEFINED BELOW.

1) ALL NEW 15 OR 20 AMPERE BRANCH CIRCUIT WORK. THIS SHALL APPLY ONLY UNDER ALL OF THE FOLLOWING CIRCUMSTANCES AND CONDITIONS.

a) ONLY WHERE CONCEALED (ALL EXPOSED WIRING SHALL BE INSTALLED IN CONDUIT).

COMPONENTS AND FITTINGS LISTED FOR GROUNDING AND COMPLIANT WITH THE FOLLOWING.

b) ROUTE ALL CABLES PERPENDICULAR AND PARALLEL TO THE BUILDING ARCHITECTURAL LINES/SURFACES/STRUCTURAL MEMBERS, KEEPING OFFSETS TO A MINIMUM AND FOLLOWING SURFACE CONTOURS WHERE POSSIBLE. MAINTAIN A UNIFORM ELEVATION FOR ALL CABLE RUNS WHEREVER POSSIBLE. ALL CABLES SHALL BE SUPPORTED/ANCHORED AT MAXIMUM 4 FOOT INTERVALS AND WITHIN 12" OF BOX OR OUTLET AND SHALL NOT SAG. INSTALL CABLES IN A MANNER THAT PREVENTS OVERHEATING. CABLES SHALL BE FASTENED DIRECTLY TO THE STRUCTURE USING FACTORY CLAMPS/CLIPS SPECIFICALLY DESIGNED FOR THE RESPECTIVE CABLE (CADDY OR EQUAL).

c) ONLY WHERE INSTALLED FOR NORMAL UTILITY CIRCUITS; ALL WIRING FOR EMERGENCY SYSTEM FEEDERS AND RECEPTACLE BRANCH CIRCUITS SHALL BE IN CONDUIT (EMT), NO EXCEPTIONS.

11. COMMUNICATION TECHNOLOGY SYSTEMS GENERAL

VOICE AND DATA CABLES SHALL BE INSTALLED IN "J-HOOK" STYLE PATHWAY WHERE INDICATED ON DRAWINGS. ALL OTHER WIRING/CABLES OF VOICE/DATA SYSTEMS AND ALL OTHER SYSTEMS SHALL BE INSTALLED IN CONDUIT, 3/4" MINIMUM. VERIFY ROUTE FOR "J-HOOK" WORK ABOVE CEILING IN FIELD IN ADVANCE WITH OWNER.

PROVIDE OUTLET BOXES AND CONDUIT STUBS FOR SYSTEMS AS INDICATED ON DRAWINGS. CONDUIT STUBS SHALL BE TURNED OUT IN JOIST SPACE AND, WHERE LOCATED IN AREAS WITH DRYWALL CEILINGS, SHALL BE EXTENDED TO THE NEAREST AREA WITH NO CEILING OR WITH ACOUSTICAL TILE CEILING. PROVIDE CONDUIT, BRIDLE RINGS AND RACEWAYS AS REQUIRED. ALL CONDUITS SHALL BE PROVIDED WITH SWEEP "L" 90'S AND INSULATED THROAT FITTINGS (OR BUSHINGS).

TYPICAL OUTLETS SHALL CONSIST OF A FLUSH WALL MOUNTED 4" SQUARE X 2-1/8" DEEP BOX WITH A DOUBLE GANG PLASTER RING. MAXIMUM CONDUIT FILL FOR NEW WORK SHALL BE 40%, BASED ON MANUFACTURE'S PUBLISHED DATA OF CABLE OUTSIDE

CABLE, TERMINATIONS, JACKS, LABELING, HARDWARE, SHALL BE PROVIDED BY A CERTIFIED COMMUNICATION TECHNOLOGY CONTRACTOR. CABLING SYSTEM SHALL BE PROVIDED AS REQUIRED FOR A TURNKEY, COMPLETE WORKING SYSTEMS.

DETERMINE EXACT LOCATIONS OF COMMUNICATION TECHNOLOGY EQUIPMENT, EQUIPMENT OUTLETS, ETC. IN FIELD. USE CAUTION NOT TO EXCEED THE ALLOWED BENDING RADIUS FOR RESPECTIVE CABLES AND NOT TO COMPROMISE THE INTEGRITY OF THE CABLES DURING INSTALLATION BY PULLING TIE—WRAPS TOO TIGHTLY, DAMAGING CABLES, ETC. RACEWAY/CABLING BENDING RADII SHALL BE MINIMUM AS DIRECTED BY CABLE MANUFACTURER. USE PULLING COMPOUND OR LUBRICANT, WHERE NECESSARY; COMPOUND MUST NOT DETERIORATE CONDUCTOR OR INSULATION. NEATLY DRESS ALL CABLE WORK. WORK SHALL BE INSTALLED IN A MANNER WHICH RESULTS IN MAINTAINING A MINIMUM DISTANCE OF 24 INCHES FROM FEEDER/BRANCH CIRCUIT RACEWAYS AND FROM ANY BALLASTED LIGHTING FIXTURE.

PROVIDE COLOR CODED JACKETS TO IDENTIFY RUNS OF DIFFERENT SYSTEMS. NEATLY ROUTE CABLES PARALLEL AND PERPENDICULAR TO BUILDING ARCHITECTURAL LINES. GROUP CABLES BY SYSTEM TYPE WHEREVER POSSIBLE. VERIFY EXACT LOCATIONS OF TELEPHONE SWITCH, DATA SERVER(S), HEAD—END EQUIPMENT, EQUIPMENT OUTLETS, ETC. IN FIELD.

REVIEW ALL TERMINATION AND LABELING REQUIREMENTS WITH OWNER IN ADVANCE. ALL CABLE SHALL BE PROVIDED WITH

PERMANENT ADHESIVE LABELING IDENTIFICATION BY THIS CONTRACTOR. PROVIDE TRANSPARENT ADHESIVE COVERINGS OVER EACH LABEL, WRAPPED AROUND THE LABELS AT LEAST TWO TIMES. THE LONG AXIS OF THE LABELS SHALL INSTALLED BE PARALLEL TO THE LONG AXIS OF THE RESPECTIVE CABLE ASSEMBLIES. LABELS SHALL BE APPROXIMATELY 1-1/2" LONG BY 3/8" HIGH.

INSTALL POWER CABLES IN A MANNER WHICH PREVENTS OVER-HEATING. OTHERWISE, WHEREVER POSSIBLE, BUNDLE CABLES OF THE SAME SYSTEM TOGETHER. ALSO PROVIDE COLOR CODED JACKETS, OR OTHER APPROVED LABELLING/IDENTIFICATION METHOD, TO IDENTIFY RUNS OF DIFFERENT SYSTEMS.

ALL CABLES WHICH ARE NOT ROUTED IN CONDUIT SHALL BE NEATLY BUNDLED, SECURED AT FOUR FOOT INTERVALS AND IDENTIFIED AT TEN FOOT INTERVALS. WHEREVER POSSIBLE, BUNDLE CABLES OF THE SAME SYSTEM TOGETHER. PROVIDE ADDITIONAL WALL OUTLET BOXES AND ADDITIONAL WHIPS AS/IF REQUIRED AT SYSTEMS FURNITURE TO ACHIEVE SAME.

"J-HOOK" PATHWAYS

CABLE DISTRIBUTION BRIDLE RINGS SHALL BE EQUAL TO CADDY #4BRT64 OR MONO-SYSTEMS INC. "THE HOOK" (MINIMUM 4" DIAMETER OR 4" SQUARE USABLE INTERNAL AREA) CONSTRUCTED OF ALUMINUM OR CORROSION RESISTANT STEEL WITH ROLLED EDGES OR EQUIVALENT TO PREVENT DAMAGE TO CABLE JACKETS AND INSULATION. PROVIDE SPLITS OR OPENINGS SO THAT CABLES CAN BE LAID IN THE RINGS RATHER THAN THREADED THROUGH. PROVIDE MAXIMUM 30% FILL (IN CROSS SECTION), BASED ON OUTSIDE DIAMETER OF CABLES. ACCORDINGLY, PROVIDE MULTIPLE SETS OF RINGS ALONG ANY ROUTES AS/IF

PROVIDE RINGS AT FOUR FOOT INTERVALS AND AT ALL OFFSETS. ROUTE RINGS THROUGH CORRIDORS AND SIMILAR OPEN AREAS WHEREVER POSSIBLE TO MINIMIZE WALL PENETRATIONS. SECURELY ANCHOR (MECHANICAL — NOT ADHESIVE) ALL RINGS DIRECTLY TO STRUCTURAL COMPONENTS OF THE BUILDING. RINGS SHALL NOT BE ANCHORED TO DUCTWORK, CONDUIT, PIPING, FIXTURES, EQUIPMENT, CEILING SUPPORTS, ETC. ALL RINGS SHALL BE FULLY AND READILY ACCESSIBLE AFTER INSTALLATION. NEATLY ROUTE BRIDLE RING PATHS PARALLEL AND PERPENDICULAR TO BUILDING ARCHITECTURAL LINES AND AT A CONSISTENT ELEVATION WHEREVER POSSIBLE.

ROUTE ALL BRIDLE RING PATHS AND CABLES PERPENDICULAR AND PARALLEL TO THE BUILDING ARCHITECTURAL LINES, KEEPING OFFSETS TO A MINIMUM. INSTALL BRIDLE RINGS IN A UNIFORM PLANE/ELEVATION WHEREVER POSSIBLE, KEEPING VERTICAL OFFSETS TO AN ABSOLUTE MINIMUM. PRIOR TO INSTALLATION, SUBMIT SCALED COORDINATION DRAWINGS SHOWING ALL PROPOSED ROUTING AND RING LOCATIONS FOR REVIEW BY OWNER. KEEP OFFSETS TO AN ABSOLUTE MINIMUM. BRIDLE RING PATHS SHALL BE ROUTED SO THAT A MINIMUM OF 24" EXISTS BETWEEN ANY CABLES AND ANY EMI SOURCE SUCH AS BALLASTS, MOTORS,

12. OUTLET, JUNCTION AND SWITCHBOXES

GANG TYPE OUTLET BOXES SHALL NOT BE USED. THE OUTLET BOX LOCATIONS INDICATED ON DRAWINGS SHALL BE CONSIDERED APPROXIMATE, AND THEREFORE, IT SHALL BE INCUMBENT UPON THIS CONTRACTOR TO STUDY THE GENERAL CONSTRUCTION WITH RELATION TO SPACES AND EQUIPMENT SURROUNDING EACH OUTLET. ALL OUTLET, SWITCH AND JUNCTION BOXES SHALL BE MADE OF CODE GALVANIZED STEEL COMPLETE WITH RINGS AND SCREW COVER PLATES AND LOCATED WHERE SHOWN AND NOTED ON DRAWINGS. WHERE CONDUIT IS CONCEALED, BOXES SHALL NOT BE LESS THAN 4" SQUARE X 1-1/2" DEEP. ALL BOXES SHALL BE EQUIPPED WITH PROPER COVERS TO BRING FLUSH WITH FINISHED WALL SURFACE.

WHERE OUTLET BOXES OCCUR IN BLOCK, CINDER, OR CONCRETE BLOCK, FACING TILE OR OTHER MATERIAL WHERE SUCH MATERIALS FORM THE FINISHED WALL SURFACE, THE OPENING FOR THE BOX SHALL BE CUT NEATLY AND OF THE SIZE THAT THE COVER PLATE WILL COVER ALL PARTS OF THE OPENING. CONDUIT SHALL BE USED ON EXPOSED RACEWAYS. IN GENERAL, JUNCTION BOXES SHALL BE FURNISHED AND REQUIRED BY THE NATIONAL ELECTRIC CODE, OF THE PROPER SIZES, AND SHALL BE CONSTRUCTED OF #12 GAUGE STEEL WITH REMOVABLE FRONT FASTENED ON WITH COUNTER SUNK HEAD SCREWS OR OTHER APPROVED MEANS. FOR SPECIAL APPLICATION, JUNCTION BOXES SHALL BE NOTED, DETAILED AND/OR SIZED ON THE DRAWINGS OR IN THE FIELD AS REQUIRED.

WHERE DRYWALL CEILINGS ARE USED, THE ELECTRICAL CONTRACTOR SHALL NOT INSTALL JUNCTION BOXES ABOVE THE CEILING IN INACCESSIBLE LOCATIONS. FIELD COORDINATE WITH THE CONSTRUCTION MANAGER PRIOR TO ROUGH—IN TO AVOID ANY CONFLICTS. JUNCTION BOXES ABOVE LAY—IN CEILINGS ARE ACCEPTABLE.

13. HEIGHT OF BOXES

PRIOR TO ROUGH—IN, VERIFY ALL BOX/DEVICE MOUNTING HEIGHTS AND LOCATIONS IN FIELD WITH OWNER'S REPRESENTATIVE RELATIVE TO EQUIPMENT BEING SERVED AND RELATIVE TO EXISTING CONDITIONS WHERE APPLICABLE. IN GENERAL, WHERE NOT LOCATED AT COUNTER AREAS, THE HEIGHT OF BOXES FROM FINISHED FLOOR TO CENTER OF BOXES SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON PLANS:

SWITCHES
4'0"

TELEPHONE OUTLETS (WALL PHONE)
FIRE ALARM MANUAL PULL STATIONS
FIRE ALARM A/V ALARMS
DEVICES AT SPECIAL HEIGHTS

4'0"

RECEPTACLES
1

TELEPHONE OUTLETS (DESK PHONE)
1

DATA CABLE OUTLETS
1

AS DIRECTED IN FIELD.

4. WIRE AND CABLE

FURNISH AND INSTALL ALL NECESSARY CABLE OF THE SIZE AND TYPE INDICATED ON THE DRAWINGS OR SPECIFIED HEREINAFTER. ALL WIRE SHALL BE COPPER. ALL WIRING SHALL BE NEW. NO WIRE SMALLER THAN #12 AWG SHALL BE INSTALLED UNLESS SPECIFICALLY DESIGNATED. USE OF #14 COLOR CODED WIRE WILL BE ALLOWED FOR CONTROL CIRCUITS ONLY. ALL WIRING SHALL BE IN CONDUIT UNLESS SPECIFICALLY INDICATED OTHERWISE HEREIN. ALL CONDUCTORS SHALL BE COPPER. PROVIDE STRANDED CONDUCTORS FOR ALL SIZES UNLESS INDICATED OTHERWISE.

PROVIDE THHN/THWN INSULATION FOR ALL CONDUCTORS SIZE 500 MCM (KCMIL) AND LARGER, AND NO. 8 AWG AND SMALLER. FOR ALL OTHER SIZES PROVIDE THW OR THHN/THWN INSULATION AS APPROPRIATE FOR THE LOCATIONS WHERE INSTALLED. PROVIDE COLOR CODED INSULATION/JACKET FOR PHASE IDENTIFICATION. ALL WIRES SHALL BE RATED AT 600 VOLTS.

PROVIDE TYPE XHHW—2 INSULATION FOR ALL WIRING SUBJECT TO MOISTURE, FOR ALL WIRING BELOW GRADE AND FOR ALL WIRING FED FROM ISOLATED POWER SYSTEMS.

KEEP CONDUCTOR SPLICES TO MINIMUM. PULL CONDUCTORS SIMULTANEOUSLY WHERE MORE THAN ONE IS BEING INSTALLED IN SAME RACEWAY. USE UL LISTED PULLING COMPOUND OR LUBRICANT, WHERE NECESSARY. INSTALL SPLICE AND TAP CONNECTORS WHICH POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATING THAN CONDUCTORS BEING SPLICED. USE SPLICE AND TAP CONNECTORS WHICH ARE COMPATIBLE WITH CONDUCTOR MATERIAL. INCREASE WIRE SIZES PER NEC TO OFFSET VOLTAGE DROP AS/IF REQUIRED.

15. WIRING DEVICES

DEVICES SHALL BE WHITE UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS...

SPECIFICATION GRADE RECEPTACLES:

DUPLEX 120V RECEPTACLES SHALL BE EQUAL TO LEVITON #5362 SERIES (NEMA 5-20R).

CONTROLLED DUPLEX 120V RECEPTACLES SHALL BE EQUAL TO LEVITON #5362-S2 SERIES (NEMA 5-20R)

GROUND FAULT CIRCUIT INTERRUPTER DUPLEX 120V RECEPTACLES SHALL BE EQUAL TO LEVITON #8899 SERIES (NEMA 5-20R).

DUPLEX ISOLATED GROUND 120V RECEPTACLES SHALL BE EQUAL TO LEVITON #5362-IG. SINGLE ISOLATED GROUND 120V RECEPTACLES SHALL BE EQUAL TO LEVITON #5361-IG (NEMA 5-20R).

SPECIAL PURPOSE RECEPTACLES SHALL BE OF THE SIZE, TYPE AND MANUFACTURER AS INDICATED ON THE PLANS OR AS DETERMINED IN FIELD.

SWITCHES:

SINGLE POLE 120/277 SWITCHES SHALL BE EQUAL TO LEVITON #1221-2 SERIES. PILOT LIGHT SWITCHES SHALL BE EQUAL TO 1221-PL

1222-PL

3-WAY 120/277 SWITCHES SHALL BE EQUAL TO LEVITON #1223-2 SERIES; PILOT LIGHT SWITCHES SHALL BE EQUAL TO

DOUBLE-POLE 120/277 SWITCHES SHALL BE EQUAL TO LEVITON #1222-2 SERIES; PILOT LIGHT SWITCHES SHALL BE EQUAL TO

OCCUPANCY SENSOR DEVICES SHALL BE AS SPECIFIED IN CONTRACT DOCUMENTS.

PROVIDE WALLPLATES WITH ENGRAVED LEGENDS WHERE INDICATED ON DRAWINGS AND/OR WHERE REQUIRED PER ELECTRICAL IDENTIFICATION SECTION. ALL DEVICE WALLPLATES SHALL BE STANDARD SIZE; "MIDWAY", "OVERSIZED" ("JUMBO") OR "EXTRA DEEP" WALLPLATES SHALL NOT BE ACCEPTABLE. CONSTRUCT WITH METAL SCREWS FOR SECURING PLATES TO DEVICES; SCREW HEADS COLORED TO MATCH FINISH OF PLATES. WALLPLATES COLOR TO MATCH DEVICE, WITH BEVELED EDGES, EQUAL TO LEVITON COMMERCIAL SPECIFICATION GRADE NYLON UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS.

16. SUPPORTS, INSERTS, CUTTING AND PATCHING

THIS CONTRACTOR SHALL DO ALL CUTTING AND PATCHING REQUIRED FOR THE ADMISSION OF HIS WORK. ANY DAMAGE DONE BY THIS CONTRACTOR TO THE BUILDING DURING THE PROGRESS OF HIS WORK SHALL BE MADE GOOD AT HIS OWN EXPENSE. ALL PATCHING SHALL BE DONE BY A SKILLED CRAFTSMAN IN THAT RESPECTIVE TRADE. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO SUPERVISE THE INSTALLATION OF, AND PAY FOR ALL ADDITIONAL MEMBERS, WOOD OR METAL AND LABOR WHICH MAY BE REQUIRED TO SUPPORT ANY TYPE OF PERMANENT OR TEMPORARY ELECTRICAL APPARATUS EMPLOYED IN THE EXECUTION OF THIS CONTRACTOR'S WORK.

SEAL ALL NEW FLOOR, CEILING, WALL, SLAB, ETC. PENETRATIONS TO MATCH OR EXCEED EXISTING/NEW ASSEMBLY FIRE RATINGS. PROVIDE SLEEVE SEALS FOR ALL SLEEVES; PROVIDE SLEEVES FOR ALL PENETRATIONS. VERIFY REQUIREMENTS IN FIELD. ALL PENETRATIONS OF FIRE—RATED OR SMOKE—RATED WALLS, FLOORS, CEILINGS, ETC. SHALL BE SEALED IMMEDIATELY AFTER RACEWAYS ARE INSTALLED. ALL NEW ELECTRICALLY RELATED WORK SHALL BE SUPPORTED DIRECTLY FROM BUILDING STRUCTURAL MEMBERS. NEW ELECTRICALLY RELATED WORK SHALL NOT BE SUPPORTED FROM DUCTWORK, DUCTWORK HANGERS, CEILING SUPPORTS, EXISTING CONDUIT SUPPORTS, ETC. ALL CONDUITS (AND CABLE ASSEMBLIES, WHERE APPLICABLE) SHALL BE ROUTED PARALLEL TO BUILDING STRUCTURAL MEMBERS. ANY AND ALL NONCOMPLIANT WORK INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE REMOVED AND REINSTALLED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AND THE ENGINEER, AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.

17. LIGHTING FIXTURES

ALL SURFACE MOUNTED BALLASTED FIXTURES SHALL BE MOUNTED WITH AIR SPACES BETWEEN FIXTURE AND SURFACE PER LATEST EDITION OF NFPA/NEC. ALL RECESSED FIXTURES SHALL BE EQUIPPED WITH NECESSARY PLASTER FRAMES AND SURFACE TRIM. ALL RECESSED FLUORESCENT FIXTURES SHALL BE EQUIPPED AND SUITABLY CONSTRUCTED TO OPERATE WITH "P" RATED BALLASTS. ALL RECESS MOUNTED INCANDESCENT AND H.I.D. FIXTURES SHALL HAVE UL APPROVED THERMAL PROTECTION PER LATEST EDITION OF NFPA/NEC. ALL JUNCTION BOXES AND SERVICEABLE COMPONENTS (BALLASTS, THERMAL PROTECTION DEVICES, FUSES, ETC.) FOR RECESSED FIXTURES SHALL BE READILY ACCESSIBLE FOR SERVICE OR REPLACEMENT FROM BELOW THE CEILING, WITHOUT REMOVING ANY CEILING COMPONENTS (OTHER THAN TILES).

WHERE PLASTER FRAMES ARE INFERRED FOR LIGHTING FIXTURES (EITHER BY NARRATIVE OR BY CATALOG NUMBER OR BY APPLICATION) THE ACTUAL FUNCTION SHALL BE TAKEN TO MEAN FOR MOUNTING WITHIN GYPSUM BOARD OR SIMILAR TYPE CEILING SYSTEM (I.E. NOT WITHIN WET PLASTER CEILING SYSTEM).

ALL LIGHTING FIXTURES UTILIZED FOR EMERGENCY EGRESS LIGHTING SHALL BE CONNECTED AHEAD OF SWITCHING. ALL BALLASTS OF THE SAME TYPE SHALL BE OF THE SAME MANUFACTURER AND CATALOG NUMBER. ALL LAMPS OF THE SAME TYPE SHALL BE OF THE SAME MANUFACTURER AND CATALOG NUMBER.

PROVIDE LOW ENERGY SOLID STATE RAPID START ELECTRONIC FLUORESCENT LAMP BALLASTS (LESS THAN OR EQUAL TO 20%

THD) SPECIFICALLY DESIGNED FOR OPERATING LAMP TYPES INDICATED. FLUORESCENT BALLASTS SHALL BE MOTOROLA OR

ALL FIXTURES SHOWN ON DRAWINGS WITH MULTI-LEVEL SWITCHING SHALL BE PROVIDED WITH MULTIPLE BALLASTS TO ACCOMMODATE SAME. ALL OTHER FIXTURES MAY CONTAIN EITHER SINGLE BALLASTS OR MULTIPLE BALLASTS AS REQUIRED TO FULFILL REQUIRED FUNCTION AND AS REQUIRED TO COMPLY WITH CONSTRUCTION SCHEDULE.

INCANDESCENT LAMPS SHALL BE SYLVANIA OR PHILIPS, LONG LIFE TYPE (3000 HOURS). ALL INCANDESCENT LAMPS SHALL BE INSIDE FROSTED UNLESS SPECIFICALLY DIRECTED OTHERWISE. PROVIDE SOCKET ADAPTERS/EXTENDERS IF REQUIRED FOR ACCOMMODATING THE SPECIFIED LAMP.

FLUORESCENT LAMP COLOR TEMPERATURE SHALL BE 3500K (VERIFY).

COMPACT FLUORESCENT TWIN TUBE/DUAL TWIN TUBE LAMPS SHALL BE OSRAM OR PHILIPS, 82 CRI, MINIMUM 10,000 HOURS RATED. LONG FLUORESCENT TWIN TUBE LAMPS SHALL BE OSRAM OR PHILIPS, 82 CRI, 3150 INITIAL LUMENS, MINIMUM 20,000

F32T8 FLUORESCENT LAMPS SHALL BE RAPID START, ENERGY SAVING TYPE, MINIMUM 75 CRI, MINIMUM 2850 INITIAL LUMENS AND MINIMUM 20,000 HOURS RATED. LAMPS SHALL BE SYLVANIA, OSRAM OR PHILIPS, EQUAL TO SYLVANIA #F032/RS.

ALL SURFACE AND RECESSED CEILING FIXTURES INSTALLED ON GRID OR TILE CEILINGS SHALL BE INSTALLED TO AGREE WITH MODULE OF CEILING EITHER DISPLACING A TILE, OR UNIT ON CENTER OF TILE, OR CENTERED ON GRID LINES.

PROVIDE FIXTURES AND/OR FIXTURE OUTLET BOXES WITH HANGERS TO PROPERLY SUPPORT FIXTURE WEIGHT. ALL LIGHTING FIXTURES INSTALLED IN OR ON SUSPENDED CEILING SYSTEMS SHALL BE ANCHORED DIRECTLY TO THE BUILDING STRUCTURAL SYSTEM ABOVE (ANCHORED PER NEC). SUCH ANCHORING SHALL BE INDEPENDENT OF THE CEILING SUPPORT SYSTEM. ALL

A POINT IN ADDITION TO THE OUTLET BOX FIXTURE STUD.

REPLACE DEFECTIVE LAMPS FOR A PERIOD OF ONE YEAR FOLLOWING THE TIME OF SUBSTANTIAL COMPLETION. WHERE USED FOR TEMPORARY LIGHTING PRIOR TO TIME OF SUBSTANTIAL COMPLETION, REPLACE ALL INCANDESCENT LIGHTING FIXTURE LAMPS, AS WELL AS ANY LAMPS WHICH ARE DEFECTIVE, DAMAGED OR BURNED OUT.

FOR ALL EXISTING FIXTURES WHICH ARE SCHEDULED FOR RELISE REMOVE FROM EXISTING CELLINGS DURING DEMOLITION:

FIXTURES SHALL BE INSTALLED PLUMB AND LEVEL. SUPPORT SURFACE MOUNTED FIXTURES GREATER THAN 2 FEET IN LENGTH AT

FOR ALL EXISTING FIXTURES WHICH ARE SCHEDULED FOR REUSE, REMOVE FROM EXISTING CEILINGS DURING DEMOLITION; PROTECT DURING CONSTRUCTION; CLEAN, SERVICE (IF REQUIRED), RE-LAMP (WITH LAMPS TO MATCH BUILDING STANDARD OR PER THIS SECTION AS NOTED) AND REINSTALL AT LOCATIONS INDICATED.

FOR ALL EXISTING FIXTURES WHICH ARE SCHEDULED TO BE REMOVED AND TURNED OVER TO OWNER, THE FIXTURES SHALL BE DISCONNECTED, CAREFULLY REMOVED AND TURNED OVER TO OWNER. TRANSFER SUCH FIXTURES TO STORAGE AREA AS DIRECTED IN FIELD.

18. MECHANICAL EQUIPMENT

PROVIDE ALL CONDUIT AND OUTLET BOXES AS REQUIRED FOR ALL CONTROL WIRING AND THERMOSTATS. FURNISH AND INSTALL POWER WIRING AND MAKE LINE CONNECTIONS TO ALL HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT. ELECTRICAL CONTRACTOR SHALL EXAMINE THE APPROVED DRAWINGS OF ALL BRANCHES AND SHALL WIRE AND CONNECT ALL MOTORS, DISCONNECTS, CONTROL DEVICES AND OTHER ITEMS REQUIRING ELECTRICITY FOR OPERATION. THIS CONTRACTOR SHALL MAKE THE NECESSARY ELECTRICAL CONNECTIONS BETWEEN THE SPECIFIED EQUIPMENT AND THE JUNCTION BOX NEAR EQUIPMENT WITH FLEXIBLE METALLIC CONDUIT AND MATCHED CONNECTORS. NO FLEXIBLE CONDUIT SHALL BE EXPOSED IN FINISHED ROOMS. EACH MOTOR SHALL HAVE DISCONNECT SWITCH OR MANUAL STARTER INSTALLED BY THIS CONTRACTOR AHEAD OF MOTOR OR MOTOR MAGNETIC STARTER. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONTROL AND INTERLOCK WIRING AS SPECIFICALLY INDICATED ON THE DRAWINGS. ALL OTHER CONTROL WIRING REQUIRED FOR OPERATION OF THE SYSTEMS SHALL BE PROVIDED BY THE HEATING CONTRACTOR.

19. ELECTRICAL DISTRIBUTION EQUIPMENT

DISCONNECTS, STARTERS & FUSES:

SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE EQUIPMENT OF ONE OF THE FOLLOWING (FOR EACH TYPE AND RATING): SQUARE D CO.

DISCONNECT SWITCHES SHALL BE EQUAL TO SQUARE D TYPE HD. ALL SAFETY SWITCHES/DISCONNECTS SHALL BE HEAVY DUTY, SAFETY TYPE, QUICK MAKE AND QUICK BREAK AND EXTERNALLY OPERATED. UNLESS NOTED OTHERWISE ON DRAWINGS OR DIRECTED OTHERWISE IN FIELD, ALL DISCONNECT SWITCHES SHALL BE FUSED. UNLESS NOTED OTHERWISE ON DRAWINGS OR DIRECTED OTHERWISE IN FIELD, BRACE ALL DISCONNECT SWITCHES FOR 200,000 A.I.C. PROVIDE HEAVY—DUTY SWITCHES, WITH FUSES OF CLASSES AND CURRENT RATINGS INDICATED AND UL LISTED FOR USE AS SERVICE EQUIPMENT UNDER UL STANDARD 98 OR 869. SEE SECTION "FUSES" FOR SPECIFICATIONS. WHERE CURRENT LIMITING FUSES ARE INDICATED, PROVIDE SWITCHES WITH NON—INTERCHANGEABLE FEATURE SUITABLE ONLY FOR CURRENT LIMITING TYPE FUSES. INSTALL DISCONNECT SWITCHES WITHIN SIGHT OF CONTROLLER POSITION UNLESS OTHERWISE INDICATED.

EXCEPT AS OTHERWISE INDICATED, PROVIDE MOTOR STARTERS AND ANCILLARY COMPONENTS; OF TYPES, SIZES, RATINGS AND ELECTRICAL CHARACTERISTICS INDICATED, WHICH COMPLY WITH MANUFACTURER'S STANDARD MATERIALS, DESIGN AND CONSTRUCTION IN ACCORDANCE WITH PUBLISHED PRODUCT INFORMATION, AND AS REQUIRED FOR COMPLETE INSTALLATIONS. ALL STARTERS SHALL BE EQUIPED WITH PILOT LIGHTS. ALL STARTERS SHALL BE SIZED ACCORDING TO LOAD BEING SERVED OR AS NOTED ON DRAWINGS, WHICHEVER REQUIREMENT IS LARGER. MANUAL AND MAGNETIC STARTERS THERMAL OVERLOAD ELEMENTS SHALL BE RATED BETWEEN 115% AND 125% FULL LOAD CURRENT OR AS CALLED FOR UNDER NEC. INSTALL AND CONNECT CAPACITORS FURNISHED BY HVAC CONTRACTORS AHEAD OF OVERLOADS WHERE APPLICABLE.

PROVIDE SINGLE-PHASE AC FRACTIONAL HP MANUAL MOTOR STARTERS, OF SIZES AND RATINGS REQUIRED. EQUIP WITH MANUALLY OPERATED QUICK-MAKE, QUICK-BREAK TOGGLE MECHANISMS; AND WITH ONE-PIECE MELTING ALLOY TYPE THERMAL UNITS. EQUIP WITH THERMAL OVERLOAD RELAY WITH FIELD ADJUSTMENT CAPABILITY OF PLUS OR MINUS 10% VARIATION OF NOMINAL OVERLOAD HEATER RATING, FOR PROTECTION OF FRACTIONAL HP MOTORS AS SHOWN ON DRAWINGS. STARTER SHALL BECOME INOPERATIVE WHEN THERMAL UNIT IS REMOVED. PROVIDE STARTERS WITH DOUBLE BREAK SILVER ALLOY CONTACTS, VISIBLE FROM BOTH SIDES OF STARTER; GREEN PILOT LIGHTS, AND SWITCH CAPABLE OF BEING PADLOCKED-OFF. MANUAL STARTERS SHALL BE EQUAL TO THE FOLLOWING.

MANUAL STARTER IN FINISHED AREAS:

SQUARE D #2510 FLUSH MOUNTED, 2—POLE TOGGLE SWITCH TYPE WITH NEON PILOT AND NEMA 1 TYPE B ENCLOSURE FOR FLUSH WALL INSTALLATION.

MANUAL STARTER FOR EXPOSED CONDUIT INSTALLATION:

SQUARE D #8536 SURFACE MOUNTED, 2—POLE TOGGLE SWITCH TYPE WITH NEON PILOT AND NEMA 1 TYPE FG—2P ENCLOSURE FOR SURFACE WALL INSTALLATION.

SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE FUSES OF ONE OF THE FOLLOWING. ALL FUSES SHALL BE OF THE SAME MANUFACTURER: BUSSMAN, LITTELFUSE.

EXCEPT AS OTHERWISE INDICATED, PROVIDE FUSES OF TYPES, SIZES, RATINGS, AND AVERAGE TIME—CURRENT AND PEAK LET—THROUGH CURRENT CHARACTERISTICS INDICATED, WHICH COMPLY WITH MANUFACTURER'S STANDARD DESIGN, MATERIALS, AND CONSTRUCTED IN ACCORDANCE WITH PUBLISHED PRODUCT INFORMATION, AND WITH INDUSTRY STANDARDS AND CONFIGURATIONS.

FUSES 1 AMPERE THROUGH 600 AMPERES SHALL BE REJECTION TYPE. FUSES 601 AMPERES THROUGH 6000 AMPERES SHALL BE HI-CAP, BOLT TYPE.

PROVIDE FACTORY FUSE IDENTIFICATION LABELS, INSTALLED ON THE INSIDE OF THE DOOR OF EACH SWITCH INDICATING TYPE AND SIZE OF FUSES INSTALLED. FOR TYPES AND RATINGS REQUIRED, FURNISH ADDITIONAL FUSES, AMOUNTING TO 10 PERCENT OF FUSES SUPPLIED, BUT NOT LESS THAN ONE SET OF 3 OF EACH KIND.

EACH FUSE SHALL BE CLEARLY FACTORY MARKED WITH CLASSIFICATION, CHARACTERISTICS, AMPERE RATINGS, VOLTAGE RATINGS, ETC. FUSES SHALL NOT BE SHIPPED INSTALLED IN SWITCHES NOR SHALL THEY BE INSTALLED IN THE EQUIPMENT UNTIL THE

EQUIPMENT UNTIL THE EQUIPMENT IS READY TO BE ENERGIZED. ALL FUSES SHALL BE OF THE SAME MANUFACTURER.

PRIOR TO INSTALLING FUSES FOR PROTECTION OF SPECIFIC EQUIPMENT, MOTORS, ETC., VERIFY RECOMMENDED FUSE SIZE/TYPE IN FIELD FROM RESPECTIVE EQUIPMENT MANUFACTURER. IF A CONFLICT IN FUSE SIZE/TYPE RESULTS BETWEEN MANUFACTURER'S RECOMMENDATIONS AND ABOVE SPECIFICATIONS, CONTACT ENGINEER. PROVIDE ALL REQUIRED FUSES UNDER BASE BID. INSTALL FUSES IN FUSED SWITCHES.

CONTACTORS & TIMECLOCKS:

LIGHTING CONTACTORS SHALL BE EQUAL TO SQUARE D "TYPE L" SERIES FOR NON-MOTOR LOADS (I.E. FOR TUNGSTEN &

BALLAST LIGHTING AND RESISTANCE HEATING LOADS), ELECTRICALLY OPERATED, ELECTRICALLY HELD, IN NEMA 1 ENCLOSURE, WITH 120V COIL, 2 THROUGH 12—POLE VERSIONS AND CHARACTERISTICS AS INDICATED ON DRAWINGS OR AS REQUIRED. DRY CONTACTS SHALL BE RATED AT 30A, 208V OR 600V AS REQUIRED. VERIFY ALL COIL VOLTAGE RATINGS IN FIELD.

BASIC MULTI—PURPOSE TIME CLOCK SHALL BE EQUAL TO INTERMATIC #T103 24HR MECHANICAL DPST CONTROL OF LOADS UP TO 40A WITH 1 TO 12 ON/OFF OPERATIONS EACH DAY. FOR ENERGY CODE COMPLIANCE OR PER LANDLORD CRITERIA, USE TORK DTS400B TIME CLOCK THAT SHALL BE PROGRAMMABLE 365 DAY, 24 HOUR WITH OVERRIDE CONTROLS. UNIT SHALL BE 4 CHANNEL. PROVIDE ALL REQUIRED EXTERNAL CONTACTORS, RELAYS, ETC. TO RENDER THE CONTROL SYSTEMS FULLY OPERATIONAL. VERIFY ZONE CONTROL REQUIREMENTS IN FIELD PRIOR TO ROUGH—IN. PROVIDE BATTERY BACKUP EXTENDED POWER CARRYOVER. CUSTOM PROGRAMMING SHALL BE CONFIGURED AS SPECIFIED BELOW.

OPERATING HOURS SHALL BE SET AS FOLLOWS:

1. VERIFY WITH LANDLORD AND OWNER FOR EXACT SETTINGS

<u>PANELBOARDS</u>

SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PANELBOARD PRODUCTS OF THE FOLLOWING (FOR EACH TYPE AND RATING OF PANELBOARD AND ENCLOSURE): SQUARE D COMPANY

PANELS SHALL BE DEAD FRONT, SAFETY TYPE, FURNISHED WITH BRANCH CIRCUIT PROTECTING DEVICES, EQUIPMENT GROUNDING

BOX, MAIN BUS AND CABLE LUGS FACTORY ASSEMBLED, WITH ALL COMPONENTS IN PLACE, READY FOR INSTALLATION. CABINET SIZES ARE BASED UPON A 20" WIDE BY 6" DEEP PANEL UNLESS OTHERWISE NOTED. PANELBOARDS SHALL BE EQUIPPED WITH FLUSH TYPE LOCK AND CATCH. ALL LOCKS SHALL BE KEYED ALIKE, AND TWO KEYS ARE TO BE SUPPLIED WITH EACH LOCK.

PANELBOARDS SHALL BEAR UL LABELS FOR THEIR SPECIFIC APPLICATIONS. PANELBOARDS SHALL BE SUITABLE FOR SERVICE VOLTAGE WITH NUMBER OF BRANCH CIRCUITS OF CAPACITY SCHEDULED. UNLESS OTHERWISE INDICATED, PANELBOARDS AND SECTIONS THEREOF, IF ANY, SHALL HAVE MAIN LUGS ONLY OF CAPACITY EQUAL TO, OR GREATER THAN, THE RATING OR SETTING OF THE OVER THE CURRENT PROTECTIVE DEVICE NEXT BACK ON THE LINE. ALL CIRCUIT BREAKER PANELBOARD BUS ASSEMBLIES SHALL BE OF THE DISTRIBUTED (SEQUENCE) BUSSING TYPE THROUGHOUT, SO THAT ANY 2 ADJACENT SINGLE POLE BREAKERS AND/OR SPACES SHALL BE REPLACEABLE BY A 2 POLE INTERNAL COMMON TRIP BREAKER, AND ANY 3 ADJACENT SINGLE POLE BREAKERS AND/OR SPACES SHALL BE REPLACEABLE BY A 3 POLE INTERNAL COMMON TRIP BREAKER, 15 AMP THROUGH 70 AMP INCLUSIVE, WITHOUT DISTURBING ANY OTHER BREAKER. ALL PANELBOARDS SHALL BE UL LISTED AND LABELED FOR USE AS SERVICE ENTRANCE EQUIPMENT WHERE BEING USED AS SUCH.

DISTRIBUTION PANELS SHALL BE SQUARE D I-LINE.

480Y/277 VOLT HIGH VOLTAGE PANELS SHALL BE SQUARE D NF.

208Y/120V LIGHTING AND APPLIANCE PANELBOARDS SHALL BE EQUAL TO SQUARE D NQOD WITH BOLT-ON BRANCH BREAKERS.

ALL BUSSING SHALL BE COPPER. CURRENT CARRYING CONTACT SURFACES SHALL BE SILVER OR TIN PLATED. MAIN BUSES AND CONNECTORS SHALL BE HARD DRAWN COPPER OF 98% CONDUCTIVITY, WITH CURRENT CARRYING CAPACITY TO MAINTAIN ESTABLISHED RISE TESTS AS DEFINED IN UL STANDARD UL 67.

ALL BRANCH CIRCUIT BREAKERS SHALL BE FULL AMBIENT COMPENSATED THERMAL MAGNETIC MOLDED CASE WITH QUICK—MAKE AND QUICK—BREAK ACTION AND POSITIVE HANDLE TRIP INDICATION, BOTH ON MANUAL AND ON AUTOMATIC OPERATION. BREAKERS SHALL BE OF THE OVER—THE—CENTER TOGGLE OPERATING TYPE WITH THE HANDLE GOING TO A POSITION BETWEEN "ON" AND "OFF" TO INDICATE AUTOMATIC TRIPPING.

ALL CIRCUIT BREAKERS SHALL BE FULL SIZE. "TANDEM" OR "SPLIT" BREAKERS SHALL NOT BE PERMITTED. ALL MULTI—POLE

BREAKERS SHALL HAVE INTERNAL COMMON TRIP WITH ALL LOAD SIDE BOX LUGS OF ONE BREAKER IN THE SAME GUTTER. ALL CIRCUIT BREAKERS SHALL HAVE SEALED CASES TO PREVENT TAMPERING. ALL 15 AND 20 AMPERE BRANCH CIRCUIT BREAKERS SHALL BE UL LISTED AS SWD (SWITCHING DUTY). ALL 15-70 AMPERE BRANCH CIRCUIT BREAKERS SHALL BE HACR TYPE. ALL GFI CIRCUIT BREAKERS SHALL BE UL CLASS A WITH MAXIMUM THRESHOLD OF 5 MA. ALL BRANCH CIRCUIT BREAKERS SERVING ALL BALLASTED (FLUORESCENT/HID) LIGHTING LOADS SHALL BE HID RATED. PROVIDE 20 (+/-) NON-PADLOCK TYPE BREAKER LOCK-ON DEVICES AND INSTALL ON BRANCH BREAKERS AS DIRECTED IN FIELD (NIGHT LIGHTS, COMPUTERS, SECURITY, ETC.). PROVIDE DETAILED TYPEWRITTEN SCHEDULES FOR ALL PANELBOARDS. CIRCUIT BREAKERS SHALL BE FURNISHED AS SCHEDULED ON THE DRAWINGS OR AS OTHERWISE REQUIRED BASED ON FIELD DETERMINATIONS.

PROVIDE ALL ELECTRICAL DISTRIBUTION RELATED EQUIPMENT WITH APPROPRIATELY BRACED BUSSING AND PROPERLY RATED BREAKERS, FUSES, ETC. FOR THE AVAILABLE FAULT CURRENTS.

IN EXISTING BUILDINGS WHERE FAULT CURRENT VALUES ARE NOT INDICATED ON DRAWINGS, COORDINATE WITH EXISTING

"UPSTREAM" DISTRIBUTION EQUIPMENT PROVIDE EQUIPMENT AIC RATINGS TO MEET OR EXCEED SAME.

FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. DIRECTORIES SHALL BE NEATLY TYPEWRITTEN. ALL PANELBOARD DIRECTORIES SHALL INCLUDE THE ACTUAL ROOM NAMES/NUMBERS THAT ARE SELECTED FOR INTERIOR SIGNAGE/DESIGNATION.

TRANSFORMERS:

POWER DISTRIBUTION TRANSFORMERS SHALL BE SQUARE D DRY TYPE WITH COPPER WINDINGS.
PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PAD (WITH CHAMFERED EDGES) FOR ALL FLOOR MOUNTED TRANSFORMERS. INSTALL
UNITS ON VIBRATION MOUNTS; COMPLY WITH MANUFACTURER'S INDICATED INSTALLATION METHOD.

DRY-TYPE TRANSFORMERS SHALL BE OF THE ENCLOSED VENTILATED TYPE WITH KVA AND VOLTAGE RATING AS CALLED FOR ON
THE DRAWINGS AND WITH 150' CLASS H INSULATION AND MINIMUM OF SIX STANDARD FULL CAPACITY TAPS. SOUND LEVEL SHALL
BE LOW AND INSTALLATION SHALL INCLUDE KORFUND OR EQUAL VIBRATION DAMPENING MOUNTS AND FLEXIBLE STEEL CONDUIT
FOR PRIMARY AND SECONDARY. LOCATE TRANSFORMER AS NOT TO CAUSE SERVICING OR CLEARANCE DIFFICULTIES OF VIOLATIONS

20. <u>FIRE ALARM WORK (IF REQUIRED)</u>

WITH OTHER EQUIPMENT.

IT SHALL BE THE RESPONSIBILITY OF THE FIRE ALARM SYSTEMS CONTRACTOR TO DESIGN AND INSTALL A COMPLETE SYSTEM AS REQUIRED. THE FIRE ALARM SYSTEMS CONTRACTOR SHALL OBTAIN ALL REQUIRED APPROVALS AND PERMITS FROM THE STATE FIRE MARSHALL'S OFFICE AND LOCAL AUTHORITY HAVING JURISDICTION FOR APPROVAL.

FOR THE PURPOSE OF TRADE COORDINATION, THE FIRE ALARM SYSTEM CONTRACTOR SHALL PROVIDE TO THE ELECTRICAL CONTRACTOR A COMPLETE SET OF PLAN DRAWINGS.

MANUFACTURER AS, AND COMPATIBLE WITH, THE EXISTING BUILDING FIRE ALARM SYSTEM. PROVIDE AUXILIARY CONTACTS IF REQUIRED FOR SPECIAL APPLICATIONS. ALL STROBE ALARMS SHALL BE ADA COMPLIANT, MINIMUM 75CD PER ADA.

ALL NEW WIRING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND IN CONDUIT (3/4" MINIMUM). FIRE ALARM SYSTEM WIRING SHALL BE INSTALLED IN A RACEWAY SYSTEM SEPARATE FROM SECURITY SUB—SYSTEM WIRING WHERE/IF APPLICABLE.

FIRE ALARM SYSTEM DEVICES (SMOKE DETECTORS, PULL STATIONS, BELLS, STROBES, ETC.) SHALL BE OF THE SAME

THE INSTALLATION SHALL INCLUDE A COMPLETE SYSTEM TEST OF THE EQUIPMENT BY THE LOCAL REPRESENTATIVE OF THE SYSTEM INSTALLED. THIS TEST SHALL BE PERFORMED IN THE PRESENCE OF REPRESENTATIVES OF THE OWNER, ENGINEER, AND LOCAL FIRE DEPARTMENT.

PROVIDE ALL REQUIRED MODIFICATIONS (CARDS, POWER SUPPLIES, HARDWARE, FIRMWARE, SOFTWARE, ETC.) TO THE EXISTING FIRE ALARM SYSTEM AS REQUIRED TO RENDER THE ENTIRE EXTENSION FULLY OPERABLE.

PROVIDE ALL REQUIRED 20A/120VAC POWER AS REQUIRED TO ENERGIZE ALL NEW FIRE ALARM RELATED COMPONENTS. THIS REQUIREMENT APPLIES WHETHER OR NOT SUCH POWER WORK IS SHOWN ON THE DRAWINGS. BRANCH CIRCUITS SERVING FIRE

ALARM RELATED EQUIPMENT SHALL BE DEDICATED TO FIRE ALARM RELATED EQUIPMENT ONLY.

DRAWINGS (I.E. SPRINKLER FLOW SWITCHES, TAMPER SWITCHES, ETC.).

EXTERIOR/ROOF MOUNTED DUCT SMOKE DETECTORS SHALL BE IN A NEMA4X ENCLOSURE.

SMOKE DETECTOR LOCATIONS SHALL NOT EXCEED THE RATED COVERAGE OF THE DETECTOR AND, IN GENERAL, SHALL BE NO MORE THAN 15 FEET FROM A WALL OR 30 FEET APART. SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN 3 FEET FROM A SUPPLY AIR DIFFUSER. PROVIDE CONTACT BASES FOR ALL APPLICATIONS WHERE AUXILIARY CONTACTS ARE REQUIRED.

THE AUDIO/VISUAL AND VISUAL—ONLY ALARM INDICATING DEVICES SHALL BE RED ADA—COMPLIANT UNITS (WITH MINIMUM 75 CANDELA ADA—COMPLIANT STROBES) CEILING MOUNTED AS SHOWN ON PLANS. STROBE UNITS SHALL BE SYNCHRONIZED WHEREVER REQUIRED BY ANY AUTHORITY HAVING JURISDICTION, INCLUDING ADAAG. ADDITIONALLY, WHERE REQUIRED BY LOCAL AUTHORITY, THE STROBES MUST MEET ANSI S3.41 TEMPORAL CODE.

THE WATERFLOW SWITCHES. TAMPER SWITCHES AND PRESSURE SWITCHES SHALL BE PROVIDED BY THE SPRINKLER CONTRACTOR.

THE ELECTRICAL CONTRACTOR SHALL WIRE AND PROVIDE THE RELATED MONITOR MODULES AS REQUIRED.

PROVIDE ISOLATION MODULES AS REQUIRED TO ISOLATE WIRE TO WIRE SHORTS ON A DATA LOOP TO LIMIT THE NUMBER OF OTHER MODULES OR DETECTORS THAT ARE INCAPACITATED BY THE SHORT CIRCUIT FAULT AND/OR GROUNDS. ISOLATION MODULES SHALL BE PART OF THE SMOKE DETECTOR BASE. THE ISOLATION MODULES SHALL PERMIT THE ENTIRE SYSTEM TO OPERATE INDEPENDENTLY OF THE AREA DISCONNECTED BY THE ISOLATION MODULE DUE TO WIRING FAULTS.

PROVIDE MONITOR MODULES AS REQUIRED TO INTERFACE "NON-INTELLIGENT" DEVICES INTO THE SYSTEM AS SHOWN ON THE

PROVIDE CONTROL MODULES FOR ALL AUXILIARY DEVICES INCLUDING ALL SUPERVISED CONTROL FUNCTIONS SUCH AS AIR HANDLER SHUTDOWNS.

21. DUCT SMOKE DETECTOR

PROVIDE ALL REQUIRED 20A/120VAC POWER AS REQUIRED TO ENERGIZE ALL FIRE ALARM RELATED COMPONENTS. THIS REQUIREMENT APPLIES WHETHER OR NOT SUCH POWER WORK IS SHOWN ON THE DRAWINGS. BRANCH CIRCUITS SERVING FIRE ALARM RELATED EQUIPMENT SHALL BE DEDICATED TO FIRE ALARM RELATED EQUIPMENT ONLY. REFER TO MECHANICAL DRAWINGS

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PECIFICATIONS

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